

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/



49.1115.

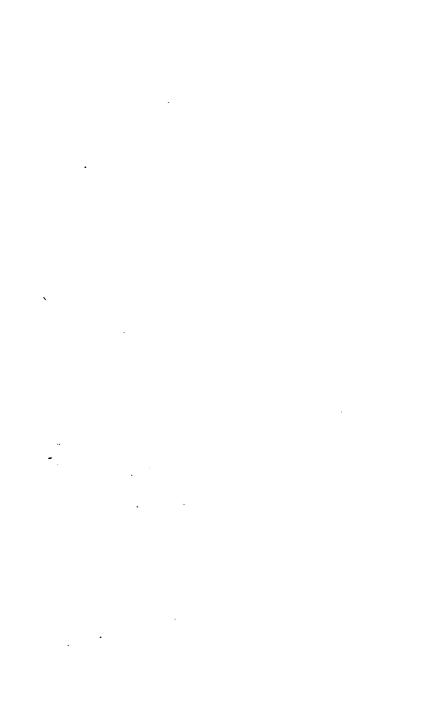


.

. •

. V

•



INTRODUCTORY

LECTURES,

DELIVERED AT

QUEEN'S COLLEGE,

LONDON.



LONDON:
JOHN W. PARKER, WEST STRAND.

M.DCCC.XLIX.

L.

PREFACE.

THESE Lectures, with the exception of those on Language, Drawing, and Mathematics, were delivered in the course of last Spring. They express the views with which the teachers at Queen's College entered upon their Work. The tone of one must often differ from that of another; even opposite sentiments may possibly be found in them. They were composed without concert or supervision; each Lecturer felt that he was speaking to his Class, not to the Public. Nevertheless, the Committee which conducts the Education of the College believes that there is a unity of purpose in its Teachers, which is not affected by their individual feelings and modes of thinking, which would be much less real than it is, if they had aimed at an exact uniformity. They think that those who

have sent their children to the College, or are in doubt whether they should send them, ought to have an opportunity of knowing what the Lecturers mean; whether they have in any degree succeeded in carrying out their meaning, must be ascertained by other testimony than their own.

The short Address at the end of the Volume does not properly belong to a set of Introductory Lectures. Why it has been added, will be understood by those who have read the Article on Governesses in the last number of the Quarterly Review. A writer, who cannot be regarded otherwise than as very friendly to the general objects of Queen's College, has hinted that the mode of examining Governesses, which the Committee have adopted, indicates a wish to exalt intellectual above moral qualifications. This charge, if it is true, cannot be too publicly proclaimed. Any institution, as the reviewer intimates, ought to be viewed with great suspicion which is possessed by a spirit so unenglish and unchristian. The intentions of the

Committee are exactly the reverse of those which have been imputed to them. They have declined to give certificates respecting the general capacity of Governesses of whom they had no previous knowledge, because they felt that such certificates must be worthless; because they wished to discourage the practice of recommending any lady to do any work for which she had not proved her competency: because they wished to awaken in parents a sense of their tremendous responsibility, to seek for satisfactory evidence, that those to whom they commit their children possess the highest gifts They thought that an examination honestly and kindly conducted, might help to save some Governesses from the sin of pretending to a knowledge which they did not possess, and some children from the moral evil of an unwholesome and insincere indoctrination. More than this it could not do. The regular teaching of a College ought to effect much more. What we suppose, it can effect, what are the limits of its influence, how it may

co-operate with other and mightier influences, the Address at the close of the Easter Term was designed to explain. Lest any reader should suppose that it was written to remove injurious impressions respecting us, he is reminded that it was delivered six months before the Article in the Quarterly Review appeared, and that it is printed as it was spoken.

CONTENTS.

| LECTU | RE | PAGE | |
|------------|--|------|-----|
| . I. | Queen's College, London: its Objects and | | |
| | Method. By the Rev. F. D. MAURICE, | | , . |
| | M.A., Chaplain of Lincoln's Inn. | 1 | |
| II. | On English Composition. By the Rev. | | |
| | CHARLES KINGSLEY, Rector of Eversley | 28 | , |
| III. | On English Literature. By the Rev. | | |
| | CHARLES KINGSLEY, Rector of Eversley | 43 | 1 |
| IV. | On the French Language. By ISIDORE | | , |
| | Brasseur, Professor of the French Lan- | | ť |
| | guage and Literature in King's College, | | |
| | London, and Charter-House | 67 | |
| v . | On the German Language. By Adolphus | | |
| | BERNAYS, Ph. Dr. Professor of the | | (|
| | German Language and Literature in | | |
| | King's College | 88 | |
| VI. | On Latin. By the Rev. S. CLARK, M.A., | | ٠. |
| | Vice-Principal of St Mark's College, | | |
| | Chelsea | 118 | |
| VII. | On the Origin of the Italian Language. | | |
| | By Dr. Beolchi | 141 | ı |
| VIII. | On the English Language and Grammar. | | |
| | By the Rev. A. B. STRETTELL, M.A. | 154 | |

CONTENTS.

| | LECTU | RE | PAGE |
|-----|-------|--|------------|
| ι. | IX. | On History and Geography. By the Rev. C. G. NICOLAY | 182 |
| V | X. | On Natural Philosophy. By the Rev. M. O'BRIEN, M.A., Professor of Natural Philosophy in King's College, London. | 209 |
| · ^ | XI. | On the Principles and Method of Teaching. By the Rev. Thomas Jackson, M.A., Principal of the National Society's Training College, Battersea | 221 |
| ı · | XII. | On Theology. By the Rev. F. D. MAURICE, M.A., Chaplain of Lincoln's Inn | 245 |
| v. | XIII. | On Vocal Music. By John Hullah, Pro- fessor of Vocal Music in King's College | . 264 |
| V | XIV. | On Harmony. By WILLIAM STERNDALE BENNETT | 284 |
| | XV. | On the Fine Arts, educationally considered. By Henry Warren, President of the New Society of Painters in Water Colours | 303 |
| 1 | XVI. | On Mathematics. By the Rev. T. G. Hall, M.A., Professor of Mathematics in King's College, London | 323 |
| | Addre | ss at the end of the First Term . | 346 |

QUEEN'S COLLEGE, LONDON:

ITS OBJECTS AND METHOD.

BY THE

REV. FREDERICK DENISON MAURICE, M.A.

CHAPLAIN OF LINCOLN'S INN.

T is proposed immediately after Easter to open a College in London for the Education of Females. The word "College," in this connexion, has to English ears a novel and an ambitious sound. I wish we could have found a simpler which would have described our object as well. Since we have chosen this, we should take pains to explain the sense in which we use it; to shew, if we can shew truly, that we are not devising a scheme to realise some favourite theory, but are seeking, by humble and practical methods, to supply an acknowledged deficiency. For this purpose, and not that I may prove the superiority of our plan to all others, I have been requested to address you now.

Some years ago a Society was established for the assistance of Governesses. Its first object was to afford temporary relief to cases of great suffering; the second to cultivate provident habits in those who

could afford to save anything out of their salaries; the third to raise annuities for those who were past work, and whose friends or former employers were unable or unwilling to support them. The necessity for the first and last of these efforts has been made painfully evident; the Committee of Ladies, who undertake to investigate applications, are continually meeting with cases of persons who have struggled hardly for years to work and live; the list of Candidates for the small pittance which the Society is able to bestow upon the most aged and helpless, is scarcely to be paralleled by any records of misery which our country, rich in them as in all things else, can supply. The experience of the Society in the other department of its labour is as encouraging as in this it is depressing. As soon as the opportunity was afforded, it was found that Governesses were eager to make themselves independent of assistance by providing for their own wants, if the scantiness of their incomes allowed them to compass this end by personal sacrifices merely; it is equally to their honour, that a great many have taken the risk of future beggary, rather than abandon the present care of relatives still poorer than themselves.

Knowing these facts, the Society might hope that they were doing something to elevate a class, as well as to cheer individual members of it; they must have felt, I think, also that measures of another kind were necessary, if the next generation of Governesses were to obtain a permanently better position than the present. The vocation of a Teacher is an awful one: you cannot do her real good, she will do others unspeakable harm, if she is not aware of its awfulness. Merely to supply her with necessaries, merely to assist her in procuring them for herself-though that is far better, because in so doing you awaken energy of character, reflection, providence—is not fitting her for her work; you may confirm her in the notion that the task of training an immortal spirit may be just as lawfully undertaken in a case of emergency as that of selling ribands. How can you give a woman self-respect, how can you win for her the respect of others, in whom such a notion, or any modification of it, dwells? Your business is, by all means, to dispossess her of it; to make her feel the greatness of her work, and yet to shew her that it can be honestly performed. A Society for the relief of Governesses was bound to consider whether they could be useful for this end; if not, whether they might set at work any agency which should aim at the accomplishment of it. might, it was thought, at least offer certificates to competent Governesses. But then they must have some means of testing their competency; there must be an examination. The members of a benevolent society could not, as such, conduct it; they invited Gentlemen who were in the habit of examining and teaching to form a Committee for the purpose. This

Committee soon heard from others, and discovered themselves, that to do any real good they must go further; they must fit the Governesses for their examination; they must provide an Education for Female Teachers. The task seemed a serious but not an impossible one. Training Institutions for the Mistresses of poorer schools are becoming general; those who have thought most upon Education have proclaimed—Governments, here and abroad, have proclaimed,—that these schools are of far more worth than all the mechanical systems by which we fancied for so long a time that masses of children might be fashioned into men. There was no reason why the teachers of the rich should be excluded from a similar benefit. Here it seemed to some of us that we might stop. We had found a class distinctly marked out, which needed our help; to prepare them should be our object; the enterprise was surely great enough; why need we take in a wider, an almost unlimited field?

It was answered by persons of maturer judgment and greater experience, that our first assumption was a wrong one; we had not a definite class to deal with, but one which was continually varying. Those who had no dream of entering upon such a work this year, might be forced by some reverse of fortune to think of it next year; was it well to insist that they should have already committed themselves to duties for which we told them they

needed preparation; might not it be an unspeakable relief to their consciences to feel that they had received the preparation? We were asked how we dared to deny that every lady is and must be a teacher-of some person or other, of children, sisters, the poor. Again it was urged that though the mere art of teaching is no doubt worthy of diligent study, and should form a part in all sound education, still the main qualification of a Governess is not an acquaintance with this method or that, but a real grounded knowledge of that which is to be taught, and a sympathy with those who are to learn from her. Shall we not, it was said, be likely to make this knowledge less sound and real, this sympathy less living, if we leave the impression upon our teacher's mind that we are chiefly concerned to put her in possession of a craft which she is to cultivate as if she were the member of a certain guild, and not as if she had interests in common with the rest of her sex? To these arguments I confess that I cannot myself see any satisfactory answer. If we yielded to them, it followed, of course, that we must give our Institution a very general character indeed; it could not be described in any terms but those I have used—one for Female Education. If any are offended by the largeness of the design, they may be assured that we would gladly have contracted it: it expanded itself in spite of us; we found that any limitation would have made the education more artificial, more pretending, and less effectual for the class which we especially desired to serve.

Though our plans must be approved or condemned, according to their fitness or unfitness, to effect the whole object which we have proposed to ourselves, you will understand them better I think if you keep in mind the point from which we started. This recollection will perhaps justify our use of the presumptuous word "College." It is commonly associated I think-in England at least-with the notion of a body which is intended first to form the teachers of the land, but which on that very account is suitable for all who seek a general, not a merely professional, culture. It is less vague and high sounding than the words "Institution," and "Establishment;" for our purpose it is more convenient than the honest monosyllable "School," because that would be likely to suggest the notion, that we undertake a superintendence which we rejoice to think will be in better hands. The teaching of a College must be in Classes; the different studies must be related to each other; but the pupils of it may obtain all that is most precious in their experience and discipline, all their highest wisdom, at home. There are a great many parents-I should suppose a majority—who would be most unwilling

that their boys, intended for the hard fighting of the world, should be kept from the preparatory buffeting of Eton or Westminster; but, who are just as unwilling that their daughters should pass the years of their childhood and girlhood, anywhere but under their roof. At the same time, they are not insensible that there are disadvantages in solitary, even in merely family, instruction, and in the disjointed feeling which is left on the mind, by a succession of masters who have no mutual understanding and no common object. Without having set before themselves any sublime ideal of Female Education, though they would, it is probable, testify great impatience of those who should propose one, such persons, nevertheless, ask again and again, why there are no Colleges for one sex as well as the other?

I own, however, that there is one distinction generally and rightly looked for in a College—one implied in the notion of it as a place for the education of Teachers—which might seem to make it unsuitable for ladies of the age at which we are willing to receive pupils. The teachers of a School may aim merely to impart information; the teachers of a College must lead their pupils to the apprehension of principles. What! it will be said, children of 12 years old, and those children girls? Is not this a practical confession that you have some new project of Education; that you desire to wage war

with all our habitual notions; that you would set up a College not so magnificent as the one with which a great poet of our day has lately made us acquainted, but scarcely less extravagant in its scheme and pretensions?

I believe we can, with a safe conscience, plead Not Guilty to these charges. We should indeed rejoice to profit in this or any undertaking, by the deep wisdom which the author of "The Princess" has concealed under a veil of exquisite grace and lightness; we should not wish to think less nobly than his Royal heroine does of the rights and powers of her sex: but we should be more inclined to acquiesce in the conclusions of her matured experience, than to restore—upon a miserably feeble and reduced scale, and with some fatal deviations from the original statutes-her splendid but transitory foundation. When I speak of leading our pupils to the study of principles, I think I mean something as nearly as possible the opposite of introducing them to an Encyclopedia of knowledge. we have anything to complain of in existing systems, it is not that they are too humble, but too vast; too vast, at least for our feebleness; it will be our greatest ambition to enter upon a task which other teachers have thought almost beneath their notice.

The word 'Accomplishments' was at one time used to define that which is characteristic of Female Education. It is not so often heard now; scarcely

ever without a protest on behalf of 'useful' studies, and a claim that they should be considered as necessary for women as for men. But the feeling, which the word expresses, has not, I think, become obsolete: other lessons, besides those which are merely graceful, are thought necessary to complete the mind and character of ladies, or to fit them for social life; completeness, or 'finish,' is as much the aim now as heretofore. And surely a very good and noble aim; the one which the sculptor in marble proposes to himself, and which is, at least, as reasonable in those who mould and chisel the inward form. But it has been sometimes feared that in our eagerness to finish, we are not equally solicitous about beginning; that the last rude inequalities are removed from the surface before the ground beneath has been fully ploughed; that many things are taught, but few learned. I do not say that these charges are peculiarly applicable to female education. I know painfully how applicable they often are to male education; but I judge from the confessions and lamentations of those who, as far as I can judge, have, to a great extent, overcome the evil in themselves, that it is deeply and extensively felt where, I believe, it is most necessary, for the sake of all, that it should be cured. For while I am willing and eager to claim for the other sex a more refined accomplishment, than we, who have so much rough work to do, can generally attain, I must think

that they have also a special right to the possession of that which is substantial and elementary. They have to watch closely the first utterances of infancy, the first dawnings of intelligence, how thoughts spring into acts, how acts pass into habits. With these profound, mysterious facts, it is their peculiar vocation to be conversant; surely they ought, aboveall others, to feel that the truths which lie nearest to us are the most wonderful; that the beginning is half, and more than half, the whole; that study is not worth much if it is not busy about the roots of things; that if they would teach children, they must become as children, and be taught with and by children; that to learn by heart is one thing, to learn by rote quite another; that to know a single fact is a blessing unspeakable, to know about a thousand rather a perplexity and torment.

If, then, I speak of a College pledging itself to be the teacher of principles, meaning exactly what I have been now setting forth, you will not, I hope, think that we are making any bold or unreasonable pretences; you will not consider it strange that we should wish even a child of 12 years old to be employed in beginning, rather than in finishing, in learning elements, rather than in acquiring a great quantity of producible information, of show-learning, be it of one kind or another. And yet I think you will feel that by this same discipline in elements, and this same study of what is homely and sub-

stantial, rather than of what is elaborate and artificial, we can best hope to form real and effectual teachers.

What I have said, is, I believe, applicable to every part of the course which we have proposed; each Lecturer in his own department will explain and illustrate it. I would rather not speak about sciences, of which, in general, I know little, of some, absolutely nothing. Still, as I am representing a Committee, it may be well that I allude briefly to the subjects we propose to teach, for the purpose of explaining how I consider each is related to our general object. As I have alluded to accomplishments, and may have appeared to disparage them, I would touch first upon two subjects which are often classed under that name, Drawing, and Music. We should have proved our utter incompetency for the task we have ventured to take upon ourselves, if we had put the smallest slight upon these pursuits; if we did not give them the greatest prominency. I cannot speak for my Colleagues, but I own for myself, that if we had been put to the hard necessity of rejecting all that is usually comprehended under the name of useful studies, and of teaching Drawing and Music efficiently, or of omitting these and teaching the others ever so well, I should, not without hestitation and deliberation, but at last, I think, very decidedly, have voted for embracing the first alternative.

say this because these studies seem to me so preeminently useful; because I perceive a use in each of them, which I hardly think can be adequately supplied by the best culture of another kind. habit of observation, a clear living apprehension of form, a faculty of distinction, a real interest in nature and in the human countenance, a power of looking below the surface of things for the meaning which they express-all these gifts, bestowed by God, but latent and crushed in most, gifts which are intended for both sexes, but are oftener exhibited by women than by men, may, I believe, be more successfully cultivated by the study of Drawing, if it is honestly and faithfully pursued, than by any book-instruction whatever. I am only repeating the language of the best and wisest teachers of mankind, when I speak of Music as able to call forth even deeper perceptions than these: to be the instrument of more wonderful blessings. In how many has it awakened the sense of an order and harmony in the heart of things which, outwardly, were most turbulent and confused; of a spirit in themselves capable of communicating with other spirits; of a union intended for us upon some other ground than that mere formal and visible association, yet justifying, explaining, sustaining that! For these reasons, and others which I am ill able to understand, but which I do not the less think to be solid, sages have spoken of Music as the most important instrument in forming men

and in building up societies. Which purpose it surely cannot fulfil if it ceases to be the study and delight of women; scarcely, I think, if they are taught to regard it chiefly as an accomplishment; if they connect it chiefly with the acquisition or exercise of mechanical dexterity; if they are not led to view it more simply, and therefore more profoundly, to care less for its displays and results, and therefore to have their hearts and understandings more open to the reception of its power and its principles.

I was bound to notice this subject first, not only because it furnishes a striking illustration of the remarks which I have made respecting our general design, but also because from this region of study we derive the best precedents for our future course, and the greatest encouragement to hope well for it. Our valued colleague, Mr Hullah, has gone before us in our experiment, and has proved the perfect reasonableness of it. No one is less competent to speak of his method than I am, and, fortunately, it does not want any other witness than its effects: but it is impossible for a person, the most utterly ignorant of his art, not to see, with infinite delight, that he has reclaimed it as a mighty agent in popular education, asserting and proving, that instead of being, as we had been taught to suppose, an ornamental grace, it is a great practical human study, testifying of that which is highest in all and com-

mon to all, meant for rich and poor, high and low together. In this way he has been a pioneer in a great moral revolution; upon the success of which it may depend in no slight degree whether a revolution of another kind shall be averted from our land. As I have been led to speak upon this point, it may be as well that I should notice a subject, about which doubts may arise hereafter. We may be required to say for what class we intend this College, and by what tests we intend to regulate our admissions. It seems to me that Mr Hullah's classes have scarcely left this question an open one. If the study which had been regarded as most exclusive has been made the possession of all, it will be very hard indeed to define who ought not to profit by any other. I am not announcing a decision of the Committee, for I do not think the point has been mooted; and if we had laid down any rules for ourselves, subsequent experience might lead us to change them; but it seems to me, generally, that we must trust the wisdom of parents at home to define the associations of their daughters by what lines they please, and that we should be incurring a serious responsibility if we refused a discipline, which, we trust, will be humanising and refining, to any who desire it.

In passing from Music to Arithmetic, I do not feel that I am leaving a fine art for a useful one; or, on the other hand, an interesting study for a

dry and formal one. The usefulness of Music I have asserted; no one who has thought at all about the science of Numbers, will doubt the profound interest of it. And this interest does not interfere in the least with its practical applications; the moment we forget its practical nature, or study it in other than practical methods, it loses its reality, and therefore its beauty. We should not wish our pupils to forget its connexion with bills for coals; what we do wish is, that they may not think of Numbers mainly as the subject of rules in a book, or as playthings for calculating boys, and forget their relation to nature and to themselves. To regard Numbers with the kind of wonder with which a child regards them, to feel that when we are learning the laws of Number we are looking into the very laws of the Universe, this makes the study of exceeding worth to the mind and the character, yet it does not create the least impatience of ordinary occupations, of a housewife's duties; on the contrary, it gives them nobility, it helps us to know that nothing is mean but that which is false. When Arithmetic is treated as an accomplishment, when there are so many rules to be learnt about it, so many feats to be performed in it, this peril is very imminent; not when it is treated by one who understands its principles, and who is able to make his scholars understand them. Whether the scholars be children, or grown people who are learning to teach children, this kind of education must be most desirable, because it both gives light and shews the process by which light is received.

We have set down Mathematics in our course of studies, knowing that we might thereby encounter the charge of giving a little learning which is dangerous, but being ready to meet that charge in this case as in others. We are aware that our pupils are not likely to advance far in mathematics, but we believe that if they learn really what they do learn, they will not have got what is dangerous but what is safe. By a little knowledge, Pope assuredly meant insincere knowledge, what I have called knowledge about things as distinguished from knowledge of them. This he had a right to condemn; it is most dangerous to have loose fragments of information clinging to our memories and understandings, a set of phrases untranslated, a nomenclature without any real equivalents. This learning checks the free play of the spirit; it imparts a sense of discontent, dreariness, self-conceit, unreality, to all that we think and do. But the least bit of knowledge that is knowledge, must be good; and I cannot conceive that a young lady can feel her mind in a more dangerous state than it was, because she has gained one truer glimpse into the conditions under which the world in which it has pleased God to place her actually exists.

A mere acquaintance with these conditions might,

however, be dry and unsatisfactory. We have introduced Natural Philosophy into our regular course. I am sure that the students in this College will derive their knowledge of it from a teacher whose first desire will be to make them acquainted with the living facts and order of nature; his last, to give them vague, smattering notions of different views and speculations concerning them.

If I have postponed the subject of Language and Grammar to that of Physics, it is not certainly that I do not feel its immense importance to the teacher and to the child. The three great modern languages, French, German, Italian, I may safely leave in the hands of our teachers, who will regard them with the affection of natives and the interest of general students; who will make their pupils know how valuable they are for their own sakes, how additionally precious because they present different aspects of language, and lead by different routes to an apprehension of its essential principles.

One feels more solicitous about our own Grammar, which is wont to be treated so cruelly, and which revenges the injuries it has received upon those girls and boys who try to learn its inexplicable rules, and innumerable exceptions. Here especially we seem to have erred through over wisdom. If we can but show our Governesses that adjectives, pronouns, verbs, mean something,

Q. C. LEC.

that they must not talk to children about qualities and substances as if they knew what such words signify-which, to say the truth, very few of us do-if we could but make them question these generalizations, and compare them with the facts so as to understand how they were arrived at, and why they are unsatisfactory,-child and teacher, instead of feeling equally that they are occupied with arbitrary rules and maxims which must be learnt and may not be transgressed, but which have no connexion with anything real, would see, under the particular limitations and definitions of English speech, certain laws which belong to all speech; laws to which they themselves are more directly subject, than even to those with which Arithmetic and Geometry are conversant. Natural philosophy too has that which corresponds to it in this region. Words are as much subjects of experiment as gases; the words which we speak every hour, when we come to examine them, what wonderful secrets do they tell! How much self-knowledge may be gained by the most imperfect meditation upon their roots and growth! Children are especially delighted by this exercise. Their faces become brighter, freer, fuller of deep meaning, as they engage in it; awful truths seem to be shining into them and out of them. And they find that the words which they speak are not to be trifled with; a lie becomes a

more serious thing to them; they not only know from your teaching, but in a measure feel for themselves, what it is.

On every account it is most desirable that women should be invited to enter upon this kind of study. They have been rightly called the guardians of the purity of the English tongue, which suffers so much from our professional pedantry and from the cant of our different circles and coteries. But intercourse even with the best society scarcely fits them to fulfil this vocation: conversation has its own affectations: our written language has, especially of late years, been depraved by them. Acquaintance with sciences physical or metaphysical, however desirable in itself, is apt to give them a love of technicalities; in these they may sometimes be tempted to indulge for the purpose of asserting their claim to a knowledge from which the foolish jealousy of our sex would exclude them. Nothing, I think, but an honest study of the English language—of its powers, principles, relations, a study practically pursued, and assisted more by illustrations than rules, can counteract these dangers and make the next generation of Englishwomen understand generally, what some of the present understand so well, that the liveliness of spoken and written discourse is not secured by an infusion of foreign words and phrases, but by a clear apprehension of that which is involved in our own.

Though I know that our English professor will

keep these objects always in sight, and though I believe that by doing so, he will enable his pupils to learn their own language very effectually, I think we have been right in adding *Latin* to our course. By doing so we do not affirm or deny, that Latin, as an accomplishment, is desirable for women generally; we merely express an opinion, that through the elements of it, faithfully studied, lies one road, and perhaps the shortest, to a thorough knowledge of English.

But the master-key to that knowledge is assuredly English Literature. By that word I mean the books of really great Englishmen. I do not mean books about their books-criticisms of English, or Scotch, or German, or French, writers upon them. Shakspeare and Milton are, I think, the best critics upon themselves; if we look to them as our teachers and not as our scholars, if we do not come prepared to judge them, but believe that they are more fitted to judge us, we shall escape many mistaken notions into which we might fall, nay, into which even they might lead us. For an humble spirit is, in all cases, safer than a proud one; those are most disposed to exclusive idolatry, who have most confidence in themselves; a genuine simple admirer, who is seeking what is beautiful, does not commit half so many blunders as the cold, self-conceited critic, who is prying for defects. These authors, I hope, will be read in the strict sense of the word; read by the

pupil as well as the teacher. The real force of an author's words, the structure of his sentences, still more his rhythm, which, in prose, as well as in poetry, is often such a help in understanding his character, can scarcely be appreciated until he is read aloud. And the teacher, I think, will be doing a real service, who succeeds in leading his pupils out of the jerking, off-hand, conversational habit of reading, which, even more than a formal monotony or sing-song, is characteristic of our times. A slow, quiet, solemn tone, equally far from these extremes, is the natural expression of earnestness in thought and feeling, and is no little help to the preservation of it. A style in writing, I hope we shall not try to cultivate, otherwise than by helping our pupils to understand what they read, and by awakening in them thoughts which they shall wish to express in the most suitable and reasonable language. The teaching men, or women, or children, to write after the manner of Addison, or Johnson, or Burke, or to separate the style of these men from the business they were about, must, it seems to me, encourage the growth of a wretchedly artificial feeling, which it should be the great effect of a sound education to check or eradicate.

In these remarks I am perhaps intruding on the subject of *Pædagogy*; one which, for the sake of mothers, as well as governesses, we have lately determined to include in our regular course. It was at

first reckoned in a class of subjects, (to be increased, we hope, greatly hereafter), which will be delivered in our rooms by eminent and popular Lecturers, as well to the members of the College as to others. Professor Cowper has promised one of his admirable courses on *Practical Mechanics*; Professor Ansted one on *Physical Geography*.

Geography, in another sense, will, I need scarcely observe, be treated as one of the ordinary subjects -Geography, in its highest, noblest use, as the handmaid of History. How important it always has been, how specially important it is now in this point of view, I need spend no words to prove. I chiefly refer to it for the purpose of remarking how the vast changes, which will make the maps of last January almost obsolete, prove the necessity of keeping the pupils continually in mind of the relation between places and persons, between countries and the natives who occupy them. I know nothing which has been so fatal to the sincerity of Education as the attempt to sever this connexion; to give a sort of independent significance to mere boundaries, apart from the records of the Migrations, Conquests, Revolutions which have fixed or disturbed them. I fear this fault has risen out of a deeper one; out of a very low appreciation of these events themselves; of the human interests which were involved in them. of the Divine purposes which they betokened. There has been a levity in our way of regarding History,

still more in our way of teaching it, of which I do hope we shall at length be cured. I do not include, in this charge of levity, merely those books which cannot speak without a joke of any acts done in past time, any feelings entertained in past time, if they were at all different from those that are sanctioned by the custom and fashion of our own; though such books seem to me specially vulgar, odious, and mischievous. Books are trifling which assume a very solemn air, and are full of moral reflections, if their authors do not reverence the sacredness of Facts, and aim at presenting human characters as they were, not as they appear when looked at through our glasses. It seems as if some persons thought the doings in God's universe were only permitted that they might have an occasion of talking about them, and pronouncing judgments upon the actors in them. know well the double danger of giving a mere dry summary of events, or of going into endless disquisitions; we must be aware of each temptation if we would avoid it. But I do think both may be avoided if we seriously believe that our business is to study our records earnestly and devoutly; because they have a meaning in them which we may be helped to draw out; not because we must put a meaning into them. No doubt, a person who keeps this end ever so steadily before himself will make a great many mistakes, and will find himself doing many things which he has blamed in others.

experiences are needful for every student and every teacher. But if the work is felt to be a difficult and a responsible one, strength for it will come; a man will be enabled to teach History so that his pupils shall feel that the past is really like the present; that the present cannot be viewed without the past; that the future lies in both; that there must be a point from which they are contemplated as one.

The last subject in our list is Theology. We would have avoided a hard word if we could; but if we had substituted Religion for Theology, we should have misrepresented our whole scheme. We look upon all the studies of which I have spoken as religious; all as concerned with the life and acts of a spiritual creature; not to be contemplated out of their relation to such a creature. We look upon them all as tending to the cultivation of reverent feeling; all as tending to lead the pupils from shadows and semblances to realities. By Theology we mean something special and definite; we mean, what the word expresses, that which is directly concerned with God and His relation to man. Each subject in our course is distinct: no lady is bound to attend the Lectures on one because she attends those on any other; still they are connected; and, to my mind, this last interprets the rest. If so, the method in which it is taught should not be different in kind from that which we have adopted in other cases, and there should be some point at

which it touches upon the other studies. The method we propose to adopt is historical. History is the subject with which, we believe, Theology stands in closest affinity. We believe that God has revealed Himself to man in and through a History; with the books of the Bible, as containing that History, we shall be occupied chiefly, perhaps exclusively. If we ever leave them, it will be not for the purpose of adopting a more dogmatical method, but that we may follow out the History of the Church. We do not mean to prove the authority of the Scripture books, or to answer objections. If the facts contained in the books themselves, do not interpret to us the facts of our own life, and the Constitution and History of the World, they are not what they profess to be; if they do, this will be the highest evidence they can produce of their divinity; the most satisfactory witness that they are what we want. Believing the current notions of them to be not too high but too low, we are willing to put them upon this trial; we hope that by endeavouring to present the history which they contain simply, coherently, reverently, we shall do better service than if we put forth ever so much skill in arguing on behalf of them.

This is our plan, which we have adopted, because we think it is the best: not because we wish to escape from difficulties which another might have involved. We do not ask you not to suspect us

of wrong religious sentiments because we profess only to teach the Bible. If you have not confidence in us on other grounds, you will be very foolish to give it us on that ground. We may teach anything we please under the name and cover of the Holy Book; we shall teach whatever we think necessary for the illustration of it, without asking who are hearing us, or what their previous conclusions on the subject may be. We cannot please all. God forbid that we should make it our object to please any.

I make this remark in reference to one department of the College; it applies equally to all. The teacher in every department, if he does his duty, will admonish his pupils, that they are not to make fashion, or public opinion, their rule; that they are not to draw or play, or to study Arithmetic, or Language, or Literature, or History, in order to shine or be admired; that if these are their ends, they will not be sincere in their work or do it well. If you teach them otherwise at home, we shall try to counteract your influence, we must counteract it so far as our lessons are honest. But if we preach this doctrine, we should conform to it. We must not, by our acts, confess that public opinion is our master, and that we are its slaves. Colleges for men and women in a great city exist to testify that Opinion is not the God they ought to worship. All hints from those who send their children to us, or even from lookers-on, may do us good; just as much good, or more, when they are ill-natured, as when they are civil. We have asked a body of Ladies1 to become visitors of our College; they have kindly promised to communicate between the teachers of it, and the guardians of its pupils. they ever chance to hear anything favourable of us they may keep it to themselves; all complaints and censures we should wish to be informed of. But we do not promise to shape our course according to the suggestions we shall receive; we shall be glad to improve our practice every day, not to alter our principle. We have considered it, and mean, with God's help, to act upon it. And if any one should tell me, "Such notions are absurd; if the world agrees to avail itself of your lessons, it will demand your homage; it will insist upon your following its maxims;" I shall not attempt to combat an opinion grounded, it would appear, upon a knowledge of English Society, to which I make no pretension; I shall merely answer, "If this College cannot stand upon the condition of its teachers continuing to be honest men, by all means let it fall."

¹Among these ladies we have the high honour and privilege of reckoning one whose life has been devoted to earnest and successful efforts for the instruction of both sexes and all ages—Mrs Marcet.

ON ENGLISH COMPOSITION.

BY THE

REV. CHARLES KINGSLEY, RECTOR OF EVERSLEY.

A N Introductory Lecture on English Composition is, I think, as much needed as one on any other subject taught in this College. For in the first place, I am not sure whether we all mean the same thing when we speak of English Composition; and in the next place, I believe that pupils themselves are very often best able to tell their teachers what sort of instruction they require. I purpose, therefore, to-day, not only to explain freely my intentions with regard to this course of Lectures, but to ask you to explain freely your own wants.

I must suppose, however, that the ladies who attend here wish to be taught how to write English better. Now the art of writing English is, I should say, the art of speaking English, and speech may be used for any one of three purposes: to conceal thought, as the French diplomatist defined its use: to conceal the want of thought, as the

majority of popular writers and orators seem nowa-days to employ it: or again, to express thought, which would seem to have been the original destination of the gift of language. I am therefore, I suppose, in duty bound to take for granted that you come here to be taught to express your thoughts better.

The whole matter then will very much depend on what thoughts you have to express. For the form of the symbol must depend on the form of the thing symbolized, as the medal does upon its die; and thus style and language are the sacraments of thoughts, the outward and visible signs of the inward and spiritual grace, or want of grace, in the writer. And even where language is employed to conceal either thought, or want thereof, it generally tells a truer tale than it was meant to do. Out of the abundance of the heart the mouth must speak, and the hollowness or foolishness of the spirit will shew itself, in spite of all cunning sleights, in unconscious peculiarities or defects of style.

Hence I say style, as the expression of thought, will depend entirely on what there is within to be expressed, on the character of the writer's mind and heart. We all allow this implicitly in the epithets which we apply to different styles. We talk of a vigorous, a soft, a weak, a frigid, an obscure style, not meaning that the words and sentences in themselves are vigorous, soft, weak, or even obscure (for

the words and their arrangement may be simple enough all the while). No, you speak of the quality of the thoughts conveyed in the words; that a style is powerful, because the writer is feeling and thinking strongly and clearly; weak or frigid, because his feelings on the subject have been weak or cold; obscure to you, because his thoughts have been obscure to himself-because, in short, he has not clearly imagined to himself the notion which he wishes to embody. The meaning of the very words, expression and composition, prove the truth of my assertion. Expression is literally the pressing out into palpable form that which is already within us. and composition, in the same way, is the composing or putting together of materials already existing;—the form and method of the composition depend mainly on the form and quality of the materials. You cannot compose a rope of sand, or a round globe of square stones-and my excellent friend Mr Strettell will tell you, in his lectures on Grammar, that words are just as stubborn and intractable materials as sand or stone, that we cannot alter their meaning or value a single shade, for they derive that meaning from a higher fountain than the soul of man, from the Word of God, the fount of utterance, who inspires all true and noble thought and speech ---who vindicated language as His own gift, and man's invention, in that miracle of the day of Pentecost. And I am bound to follow up Mr Strettell's teaching, by telling you that what holds true of words, and of their grammatic and logical composition, holds true also of their esthetic and artistic composition, of style, of rhythm, of poetry and oratory. Every principle of these which is true and good, that is, which produces beauty, is to be taken as an inspiration from above, as depending not on the will of man but of God; not on any abstract rules, of pedant's invention, but on the eternal necessities and harmony, on the being of God Himself.

These may seem lofty words, but I do not think they are likely to make us lofty-minded. I think that the belief of them will tend to make us all more reverent and earnest in examining the utterances of others, more simple and truthful in giving vent to our own, fearing equally all prejudiced and hasty criticism, all self-willed mannerism, all display of fine words, as sins against the divine dignity of language. From these assertions I think we may conclude what is the true method of studying style. The critical examination of good authors, looking at language as an inspiration, and its laws as things independent of us, eternal and divine, we must search into them as we would into any other set of facts, into nature, or the Bible, by patient induction. We must not be content with any traditional maxims, or abstract rules, such as have been put forth in Blair and Lord Kaimes, for these are merely worked out by the head, and can give us

no insight into the magic which touches the heart. All abstract rules of criticism, indeed, are very barren. One may read whole folios of them without getting one step further than we were at first, viz. that what is beautiful is beautiful. Though, indeed, these abstract rules generally tend to narrow our notions of what is beautiful, in their attempt to explain spiritual things by the carnal understanding. All they do is to explain them away, and thus those who depend on them are tempted to deny the beauty of every thing which cannot be thus analyzed and explained away, according to the established rule and method. I shall have to point out this again to you, when we come to speak of the Pope and Johnson school of critics, and the way in which they wrote whole folios on Shakespeare, without ever penetrating a single step deeper towards the secret of his sublimity. It was just this idolatry of abstract rules which made Johnson call Bishop Percy's invaluable collection of ancient ballads "stuff and nonsense." It was this which made Voltaire talk of Hamlet, as the ravings of a drunken savage, because forsooth it could not be crammed into the artificial rules of French tragedy. It is this which, even at this day, makes some men of highly cultivated taste declare that they can see no poetry in the writings of Mr Tennyson, the cause, little as they are aware of it, simply being that neither his excellencies nor his faults are after the

model of the Etonian classical school which reigned in England fifty years ago. When these critics speak of that with which they sympathize they are admirable. They become childish only when they resolve to bind all by maxims which may suit themselves.

We must then, I think, absolutely eschew any abstract rules as starting points. What rules we may require, we must neither borrow nor invent, but discover, during the course of our reading. We must take passages whose power and beauty is universally acknowledged, and try by reverently and patiently dissecting them to see into the secret of their charm, to see why and how they are the best possible expressions of the author's mind. Then for the wider laws of art, we may proceed to examine whole works, single elegies, essays, and dramas.

In carrying out all this, it will be safest, as always, to follow the course of nature, and begin where God begins with us. For as every one of us is truly a microcosm, a whole miniature world within ourselves, so is the history of each individual more or less the history of the whole human race, and there are few of us but pass through the same course of intellectual growth, through which the whole English nation has passed with an exactness and perfection proportionate of course to the richness and vigour of each person's character. Now as in the nation, so in the individual, poetry springs up before

[Q. C. LEC.]

prose. Look at the history of English literature, how completely it is the history of our own childhood and adolescence, in its successive fashions. First, fairy tales—then ballads of adventure, love, and war-then a new tinge of foreign thought and feeling, generally French, as it was with the English nation in the twelfth and thirteenth centurythen elegiac and reflective poetry—then classic art begins to influence our ripening youth, as it did the youth of our nation in the sixteenth century, and delight in dramatic poetry follows as a natural consequence,—and last, but not least, as the fruit of all these changes, a vigorous and matured prose. indeed, as elocution is the highest melody, so is true prose the highest poetry. Consider how in an air, the melody is limited to a few arbitrary notes. and recurs at arbitrary periods, while the more scientific the melody becomes, the more numerous and nearly allied are the notes employed, and the more complex and uncertain is their recurrence, in short, the nearer does the melody of the air approach to the melody of elocution, in which the notes of the voice ought continually to be passing into each other, by imperceptible gradations, and their recurrence to depend entirely on the emotions conveyed in the subject words. Just so, poetry employs a confined and arbitrary metre, and a periodic recurrence of sounds which disappear gradually in its higher forms of the ode and the drama, till the poetry at last passes into prose, a free and ever shifting flow of every imaginable rhythm and metre, determined by no arbitrary rules, but only by the spiritual intent of the subject. The same will hold good of whole prose compositions, when compared with whole poems.

Prose then is highest. To write a perfect prose must be your ultimate object in attending these Lectures; but we must walk before we can run, and walk with leading-strings before we can walk alone, and such leading-strings are verse and rhyme. Some tradition of this is still kept up in the practice of making boys write Latin and Greek verses at school, which is of real service to the intellect, even when most carelessly employed, and which, when earnestly carried out, is one great cause of the public school and college man's superiority in style, to most self-educated authors. And why should women's writings be in any respect inferior to that of men, if they are only willing to follow out the same method of self-education?

Do not fancy, when I say that we must learn poetry before we learn prose, that I am only advancing a paradox; mere talking is no more prose than mere rhyme is poetry. Monsieur Jourdain in Moliere's Comedy, makes, I suspect, a very great mistake, when he tells his master, "If that means prose, I've been talking prose all my life." I fancy the good man had been no more talking prose, than

an awkward country boy has been really walking all his life, because he has been contriving some how to put one leg before the other. To see what walking is, we must look at the perfectly drilled soldier, or at the perfectly accomplished lady, who has been taught to dance in order that she may know how to walk. Dancing has been well called the poetry of motion: but the tender grace, the easy dignity in every gesture of daily life which the perfect dancer exhibits answers exactly to that highly organized prose which ought to be the offspring of a critical acquaintance with poetry. Milton's matchless prose style, for instance, grows naturally from his matchless power over rhyme and metre. Practice in versification might be unnecessary if we were all born world-geniuses; so would practice in dancing, if every lady had the figure of a Venus and the garden of Eden for a play-ground. But even the ancient Greeks amid every advantage of climate, dress, and physical beauty, considered a thorough instruction in all athletic and graceful exercises as indispensably necessary, not only to a boy's but also to a girl's education, and in like manner, I think the exquisite models of prose with which English literature abounds will not supersede the necessity of a careful training in versification, nay, will rather make such a training all the more requisite for those who wish to imitate such excellence. Pray understand me, by using the word imitate, I do not mean that I wish you to ape the style of any favourite author. Your aim will not be to write like this man or that woman, but to write like yourselves, being of course responsible for what yourselves are like. Do not be afraid to let the peculiarities of your different characters show yourselves in your styles. Your prose may be the rougher for it, but it will be at least honest; and all mannerism is dishonesty, an attempt to gain beauty at the expense of truthful expression which invariably defeats its own ends, and produces an unpleasing effect, so necessarily one are truth and beauty. So far then from wishing to foster in you any artificial mannerism, mannerism is that foul enchanter from whom, above all others, I am sworn 'en preux Chevalier to deliver you. As Professor Maurice warned me when I undertook this lectureship, my object in teaching you about "styles" should be that you may have no style at all. But mannerism can be only avoided by the most thorough practice and knowledge. Half-educated writers are always mannerists: while as the ancient canon says, "the perfection of art is to conceal art"-to depart from uncultivated and therefore defective nature, to rise again through art to a more organized and therefore more simple naturalness. Just as, to carry on the analogy which I employed just now, it is only the perfect dancer who arrives at that height of art at which her movements seem dictated not by conscious science, but unconscious nature.

I do hope then that the study, and still more the practice of versification, may produce in you the same good effects which they do in young men; that they may give you a habit of portioning out your thoughts distinctly and authentically in a more simple, condensed, and expressive style: that they may teach you what elevation of language, what class of sounds, what flow of words may best suit your tone of thought and feeling, that they may prevent in you that tendency to monotonous repetition, and vain wordiness, which is the bosom sin of most uneducated prose writers, not only of the ladies of the 19th century, but of the middle-age monks, who, having in general no poetry, on which to form their taste, except the effeminate and bombastic productions of the dying Roman empire, fell into a certain washy prolixity, which has made monk Latin a bye-word, and puts one sadly in mind of what is too truly called young ladies' English.

I should like then to begin with two or three of the early ballads, and carefully analyze them with you. I am convinced that in them we may discover many of the great primary laws of composition, as well as the secrets of sublimity and pathos in their very simplest manifestations. It

may be that there are some here, to whom the study of old ballads may be a little distasteful, who are in an age when the only poetry which has charms is the subjective and self-conscious "poetry of the heart"-to whom a stanza of Childe Harolde may seem worth all the ballads that ever were written; but let me remind them that woman is by her sex an educator, that every one here must expect, aye hope, to be employed at some time or other in training the minds of children: then let me ask them to recall the years in which objective poems, those which dealt with events, ballads, fairy tales, down to nursery rhymes, were their favourite intellectual food, and let me ask them whether it will not be worth while for the sake of the children whom they may hereafter influence, to bestow a little thought on this earlier form of verse.

I must add too, that without some understanding of these same ballads, we shall never arrive at a critical appreciation of Shakespeare. For the English drama springs from an inter-marriage between this same ballad poetry, the poetry of incidents, and that subjective elegiac poetry which deals with the feelings and consciousnesses of man. They are the two poles, by whose union our drama is formed, and some critical knowledge of both of them will be, as I said, necessary before they can study it.

After the ballads, we ought, I think, to know a

little about the early Norman poetry, whose fusion with the pure North Saxon ballad school produced Chaucer and the poets previous to the Reformation. We shall proceed to Chaucer himself; then to the rise of the Drama; then to the poets of the Elizabethan age. I shall analyze a few of Shakespeare's master pieces; then speak of Milton and Spenser; thence pass to the prose of Sidney, Hooker, Bacon, Taylor, and our later great authors. Thus our Composition Lectures will follow an historical method, parallel with, and I hope illustrative of, the Lectures on English History.

But it will not be enough, I am afraid, to study the style of others without attempting something yourselves. No criticism teaches so much as the criticism of our own works. And I hope therefore that you will not think that I ask too much of you when I propose that weekly prose and verse compositions, on set subjects, be sent in by the class. To the examination of these the latter half of each lecture may be devoted, and the first half hour to the study of various authors: and in order that I may be able to speak my mind freely on them I should propose that they be anonymous. that you will all trust me when I tell you that those who have themselves experienced what labour attends the task of composition, are generally most tender and charitable in judging of the work of others, and that whatever remarks I may make will be such only as a man has a right to make on a woman's composition.

And if I may seem to be asking any thing new or troublesome, I beg you to remember, that it is the primary idea of this College to vindicate women's right to an education in all points equal to that of men; the difference between them being determined not by any fancied inferiority of mind, but simply by the distinct offices and character of the sexes. And surely when you recollect the long drudgery at Greek and Latin verses which is required of every highly educated man, and the high importance which has attached to them for centuries in the opinion of Englishmen, you cannot think that I am too exigent in asking you for a few sets of English verses. Believe me, that you ought to find their beneficial effect in producing, as I said before, a measured deliberate style of expression, a habit of calling up clear and distinct images on all subjects, a power of condensing and arranging your thoughts, such as no practice in prose themes can ever give. If you are disappointed of these results it will not be the fault of this long proved method of teaching, but of my own inability to carry it out. Indeed I cannot too strongly confess my own ignorance or fear my own imbecility. I stand aghast when I compare my means and my idea, but I believe that "by teaching thou shalt learn," is a rule of which I too shall take the benefit, and having begun these Lectures in the name of Him who is The Word, and with the firm intention of asserting throughout His claims as the Inspirer of all Language and of all Art, I may perhaps hope for the fulfilment of His own promise, "Be not anxious what you shall speak, for it shall be given you in that day and in that hour what you shall speak."

ON ENGLISH LITERATURE.

BY THE

REV. CHARLES KINGSLEY, RECTOR OF EVERSLEY.

A N introductory Lecture must, I suppose, be con-A sidered as a sort of art-exhibition, or advertisement of the wares hereafter to be furnished by the Lecturer. If these, on actual use, should prove to fall far short of the promise conveyed in the programme, hearers must remember, that the Lecturer is bound even to his own shame, to set forth in all commencements the most perfect method of teaching which he can devise, in order that human frailty may have something at which to aim; at the same time begging all to consider that in this piecemeal world, it is sufficient not so much to have realized one's ideal, as earnestly to have tried to realize it, according to the measure of each man's gifts. Besides, what may not be fulfilled in a first course, or in a first generation of teachers, may still be effected by those who follow them. It is but fair to expect that if this Institution shall prove, as I pray God it may, a centre of female education worthy of the wants of the coming age, the method and the practice of the College will be developing, as years bring experience and wider eye-range, till we become truly able to teach the English woman of the 19th century, to bear her part in an era, which as I believe more and more, bids fair to eclipse in faith and in art, in science and in polity, any and every period of glory which Christendom has yet beheld,

The first requisite, I think, for a modern course of English Literature is, that it be a whole course or none. The literary education of woman has too often fallen into the fault of our Elegant Extracts. and Beauties of British Poetry. It has neither begun at the beginning, nor ended at the end. The young have been taught to admire the laurels of Parnassus, but only after they have been clipt and pollarded like a Dutch shrubbery. The roots which connect them with mythic antiquity, and the fresh leaves and flowers of the growing present, have been generally cut off with care, and the middle part only has been allowed to be used—too often, of course, a sufficiently tough and dry stem. This method is no doubt easy, because it saves teachers the trouble of investigating antiquity, and saves them too the still more delicate task of judging contemporaneous authors-but like all half measures, it has bred less good than evil. If we could silence a free press, and the very free tongues of modern society; if we could clip the busy, imaginative craving mind of youth on the Procrustean bed of use and want, the method might succeed; but we can do neither—the young will read, and will hear; and the consequence is, a general complaint, that the minds of voung women are out-growing their mothers' guidance, that they are reading books which their mothers never dreamt of reading, of many of which they never heard, many at least whose good and evil they have had no means of investigating; that the authors which really interest and influence the minds of the young are just the ones which have formed no part of their education, and therefore those for judging of which they have received no adequate rules; that, in short, in literature as in many things, education in England is far behind the wants of the age.

Now this is all wrong and ruinous. The mother's mind should be the lode-star of the daughter's. Any thing which loosens the bond of filial reverence, of filial resignation, is even more destructive, if possible, to womanhood than to manhood—the certain bane of both. And the evil fruits are evident enough—self-will and self-conceit in the less gentle, restlessness and dissatisfaction in many of the meekest and gentlest; talents seem with most a curse instead of a blessing; clever and earnest young women, like young men, are beginning to wander up and down in all sorts of eclecticisms and dilettantiisms—one

year they find out that the dark ages were not altogether barbarous, and by a revulsion of feeling natural to youth, they begin to adore them as a very galaxy of light, beauty, and holiness. Then they begin to crave naturally enough for some real understanding of this strange ever-developing 19th century, some real sympathy with its new wonders, some real sphere of labour in it; and this drives them to devour the very newest authorsany book whatever which seems to open for them the riddle of the mighty and mysterious present, which is forcing itself on their attention through every sense. And so up and down, amid confusions and oscillations from pole to pole, and equally eclectic at either pole, from St Augustin and Mr Pugin, to Goethe and George Sand, and all intensified and coloured by that tender enthusiasm, that craving for something to worship, which is a woman's highest grace, or her bitterest curse-wander these poor Noah's doves, without either ark of shelter or rest for the sole of their foot, sometimes, alas! over strange ocean-wastes, into gulfs of error-too sad to speak of here—and will wander more and more till teachers begin boldly to face reality, and interpret to them both the old and the new, lest they mis-interpret them for themselves. The educators of the present generation must meet the cravings of the young spirit with the bread of life, or they will gorge themselves with poison. Telling them that they ought not to

be hungry, will not stop their hunger; shutting our eyes to facts, will only make us stumble over them the sooner; hiding our eyes in the sand, like the hunted ostrich, will not hide us from the iron necessity of circumstances, or from the Almighty will of Him, who is saying in these days to society, in language unmistakeable, "Educate, or fall to pieces! Speak the whole truth to the young, or take the consequences of your cowardice!"

On these grounds I should wish to see established in this College, a really entire course of English Literature, such as shall give correct, reverent, and loving views of every period from the earliest legends and poetry of the middle age, up to the latest of our modern authors, and in the case of the higher classes, if it should hereafter be found practicable. Lectures devoted to the criticism of such authors as may be exercising any real influence upon the minds of English women. This, I think, should be our ideal. It must be attempted cautiously and step by step. It will not be attained at the first trial, certainly not by the first Lecturer. Sufficient, if each succeeding teacher shall leave something more taught, some fresh extension of the range of knowledge which is thought fit for his scholars.

I said that the ages of history were analogous to the ages of man, and that each age of Literature was the truest picture of the history of its day; and for this very reason English Literature is the

best, perhaps the only teacher of English History, to women especially. For it seems to me that it is principally by the help of such an extended literary course, that we can cultivate a just and enlarged taste, which will connect education with the deepest feelings of the heart. It seems hardly fair, or reasonable either, to confine the reading of the young to any certain fancied Augustan age of authors, I mean those of the 17th and 18th century; especially when that age requires, in order to appreciate it, a far more developed mind, a far greater experience of mankind and of the world, than falls to the lot of one young woman out of a thousand. meat for men, and milk for babes. But why are we to force on any age spiritual food unfitted for If we do we shall be likely only to engender a lasting disgust for that by which our pupils might have fully profited, had they only been introduced to it when they were ready for it. And this actually happens with English literature: by having the so-called standard works thrust upon them too early, and then only in a fragmentary form, not fresh and whole, but cut up into the very driest hay, the young too often neglect in after life the very books which then might become the guides of their taste. Hence proceed in the minds of the young sudden and irregular revulsions of affection for different schools of writing: and all revolutions in the individual as well as in

the nation are sure to be accompanied by some dead loss of what has been already gained, some disruption of feelings, some renunciation of principles, which ought to have been preserved; something which might have borne fruit is sure to be crushed in the earthquake. Many before me must surely have felt this. Do none here remember how, when they first escaped from the dry class-drudgery of Pope and Johnson, they snatched greedily at the forbidden fruit of Byron, perhaps of Shelley, and sentimental novel-writers innumerable? How when the luscious melancholy of their morbid self-consciousness began to pall on the appetite, they fled for refuge as suddenly to mere poetry of description and action, to Southey, Scott, the ballad-literature of all ages? How when the craving returned (perhaps unconsciously to themselves) to understand the wondrous heart of man, they tried to satisfy it with deep draughts of Wordsworth's celestial and pure simplicity? How again, they tired of that too gentle and unworldly strain, and sought in Shakespeare something more exciting, more genial, more rich in the facts and passions of daily life? How even his all-embracing genius failed to satisfy them, because he did not palpably connect for them their fancy and their passions with their religious faith-and so they wandered out again over the sea of literature, Heaven only knows whither, in

[Q. C. LEC.]

4

search of a school of authors yet alas! unborn. For the true literature of the 19th century, the literature which shall set forth in worthy strains the relation of the two greatest facts, namely of the universe and of Christ, which shall transfigure all our enlarged knowledge of science and of society, of nature, of art, and man with the eternal truths of the gospel, that poetry of the future is not yet here: but it is coming, aye even at the doors; when this great era shall become conscious of its high vocation, and the author too shall claim his priestly calling, and the poets of the world, like the kingdoms of the world, shall become the poets of God and of His Christ.

But to return. Should we not rather in education follow that method which Providence has already mapped out for us? If we are bound, as of course we are, to teach our pupils to breathe freely on the highest mountain peaks of Shake-speare's art, how can we more certainly train them to do so, than by leading them along the same upward path by which Shakespeare himself rose—through the various changes of taste, the gradual developments of literature, through which the English mind had been passing before Shakespeare's time? For there was a literature before Shakespeare. Had there not been, neither would there have been a Shakespeare. Critics are now begin-

ning to see that the old fancy which made Shakespeare spring up at once, a self-perfected poet, like Minerva full-armed from the head of Jove, was a superstition of pedants, who neither knew the ages before the great poet, nor the man himself, except that little of him which seemed to square with their shallow mechanical taste. The old fairy superstition, the old legends, and ballads, the old chronicles of feudal war and chivalry, the earlier moralities and mysteries, and tragi-comic attemptsthese were the roots of his poetic tree;—they must be the roots of any literary education which can teach us to appreciate him. These fed Shakespeare's youth: why should they not feed our children's? Why indeed? That inborn delight of the young in all that is marvellous and fantastic-has that a merely evil root? No, surely! it is a most pure part of their spiritual nature; a part of "the heaven which lies about us in our infancy;" angel-wings with which the free child leaps the prison-walls of sense and custom, and the drudgery of earthly lifelike the wild dreams of childhood, it is a God-appointed means for keeping alive what noble Wordsworth calls

"those obstinate questionings
Of sense and outward things,
Fallings from us, vanishings;
Blank misgivings of a creature
Moving about in worlds not realized;"

by which

"Though inland far we be,
Our souls have sight of that immortal sea
Which brought us hither:
Can in a moment travel thither,
And see the children sporting on the shore,
And hear the mighty waters rolling evermore."

And those old dreams of our ancestors in the childhood of England, they are fantastic enough, no doubt, and unreal, but yet they are most true and most practical, if we but use them as parables and symbols of human feeling and everlasting truth. What, after all, is any event of earth, palpable as it may seem, but, like them, a shadow and a ghostly dream, till it has touched our hearts, till we have found out and obeyed its spiritual lesson? Be sure that one really pure legend or ballad may bring God's truth and heaven's beauty more directly home to the young spirit than whole volumes of dry abstract didactic morality. Outward things, beauty, action, nature, are the great problems for the young. God has put them in a visible world, that by what they see they may learn to know the unseen: and we must begin to feed their minds with that literature which deals most with visible things, with passion manifested in action, which we shall find in the early writing of our middle ages: for then the collective mind of our nation was passing through its natural stages of childhood and budding youth, as every nation and every single indi-

vidual must at some time or other do; a true "young England," always significant and precious to the young. I said there was a literary art before Shakespeare—an art more simple, more childlike, more girlish as it were, and therefore all the more adapted for young minds. But also art most vigorous and pure in point of style: thoroughly fitted to give its readers the first elements of taste, which must lie at the root of even the most complex æsthetics. I know no higher specimens of poetic style, considering the subject, and the belief of the time about them, than may be found in many of our old ballads. How many poets are there in England now, who could have written "The Twa Bairns," or "Sir Patrick Spense"? How many such histories as old William of Malmesbury, in spite of all his foolish monk miracles? As few now as there were then: and as for lying legends, they had their superstitions, and we have ours: and the next generation will stare at our strange doings as much as we stare at our forefathers. For our forefathers they were; we owe them filial reverence, thoughtful attention, and more-we must know them, ere we can know ourselves. The only key to the present is the past.

But I must go further still, and after premising that the English classics, so called, of the 16th and 18th centuries, will of course form the bulk of the Lectures, I must plead for some instruction in the

works of recent and living authors. I cannot see why we are to teach the young about the past and not about the present. After all, they have to live now, and at no other time: in this same 19th century lies their work; it may be unfortunate, but we cannot help it. I do not see why we should wish to help it. I know no century which the world has yet seen, so well worth living in. Let us thank God that we are here now, and joyfully try to understand where we are, and what our work is here. As for all superstitions about "the good old times," and fancies that they belonged to God, while this age belongs only to man, blind chance, and the evil one, let us cast them from us as the suggestions of an evil lying spirit, as the natural parents of laziness, pedantry, popery and unbelief. And therefore let us not fear to tell our children the meaning of this present day, and of all its different voices. Let us not be content to say to them, as we have been doing, "We will see you well instructed in the past, but you must make out the present for yourselves." Why, if the past is worth explaining, far more is the present,—the pressing, noisy, complex, present, where our workfield lies, the most intricate of all states of society, and of all schools of literature yet known, and therefore the very one requiring most explanation.

How rich in strange and touching utterances have been the last fifty years of English literature.

Do you think that God has been teaching us nothing in them? Will He not make our children listen to that teaching, whether we like or not? And suppose our most modern writers had added nothing to the stock of national knowledge, which I most fervently deny, yet are they not actually influencing the minds of the young? and can we prevent their doing so either directly or indirectly? If we do not find them right teaching about their own day, will they not be sure to find self-chosen teachers about it themselves, who will be almost certainly the first who may come to hand, and therefore as likely as not to be bad teachers? And do we not see every day that it is just the most tender, the most enthusiastic, the most precious spirits, who are most likely to be misled, because their honest disgust at the follies of the day has most utterly outgrown their critical training? And that lazy wholesale disapprobation of living writers, so common and convenient, what does it do but injure all reverence for parents and teachers, when the young find out that the poet, who as they were told, was a bungler and a charlatan, somehow continues to touch the purest and noblest nerves of their souls, and that the author who was said to be dangerous and unchristian, somehow makes them more dutiful, more earnest. more industrious, more loving to the poor? I speak of actual cases. Would to God they were not daily ones!

Is it not then the wiser, because the more simple and trustful method, both to God and our children to say "You shall read living authors, and we will teach you how to read them; you, like every child that is born into the world, must eat the fruit of the tree of knowledge of good and evil: we will see that you have your senses exercised to discern between that good and that evil. You shall have the writers for whom you long, as far as consists with common prudence and morality, and more, you shall be taught them: all we ask of you is to be patient and humble; believe us, you will never really appreciate these writers, you will not even rationally enjoy their beauties, unless you submit to a course of intellectual training like that through which most of them have passed, and through which certainly this nation which produced them has passed, in the successive stages of its growth."

The best method, I think, of working out these principles would be to devote a few lectures in the last term of every complete course, to the examination of some select works of recent writers, chosen under the sanction of the Educational Committee. But I must plead for whole works. "Extracts" and "Select Beauties" are about as practical as the worthy in the old story, who, wishing to sell his house, brought one of the bricks to market as a specimen. It is equally unfair on the author and on the pupil; for it is impossible to shew the merits

or demerits of a work of art, even to explain the truth or falsehood of any particular passage, except by viewing the book as an organic whole. And as for the fear of raising a desire to read more of an author than may be proper—when a work has once been pointed out as really hurtful, the rest must be left to the best safe-guard which I have yet discovered, in man or woman—the pupil's own honour.

Such a knowledge of English literature would tend no less, I think, to the spread of healthy historic views among us. The literature of every nation is its auto-biography. Even in its most complex and artistic forms, it is still a wonderfully artless and unconscious record of its doubts and its faith, its sorrows and its triumphs, at each era of its existence. Wonderfully artless and correct—because all utterances which were not faithful to their time. which did not touch some sympathetic chord in their heart's souls, are pretty sure to have been swept out into wholesome oblivion, and only the most genuine and earnest left behind for posterity. The History of England indeed is the literature of England-but one very different from any school history, or other now in vogue; you will find it neither a mere list of acts of parliament, and record-office like some; nor yet an antiquarian gallery of costumes and armour, like others; nor a mere war-gazette and report of killed and wounded from time to time; least of all not a Debrett's Peerage, and catalogue of

kings and queens, (whose names are given, while their souls are ignored) but a true spiritual History of England-a picture of the spirits of our old forefathers, who worked, and fought, and sorrowed and died for us; on whose accumulated labours we now here stand. That I call a history—not of one class of offices or events, but of the living human souls of English men and English women. And therefore one most adapted to the mind of woman; one which will call into fullest exercise her blessed faculty of sympathy, that pure and tender heart of flesh, which teaches her always to find her highest interest in mankind, simply as mankind; to see the Divine most completely in the human; to prefer the incarnate to the disembodied, the personal to the abstract, the pathetic to the intellectual; to see, and truly, in the most common tale of village love or sorrow, a mystery deeper and more divine than lies in all the theories of politicians or the fixed ideas of the sage.

Such a course of history would quicken women's inborn personal interest in the actors of this lifedrama, and be quickened by it in return, as indeed it ought: for it is thus that God intended woman to look instinctively at the world. Would to God that she would teach us men to look at it thus likewise! Would to God that she would in these days claim and fulfil to the uttermost her vocation as the priestess of charity! that woman's heart would

help to deliver man from bondage to his own tyrannous and all-too-exclusive brain! from our idolatry of mere dead laws and printed books—from our daily sin of looking at men, not as our struggling and suffering brothers, but as mere symbols of certain formulæ, incarnations of sets of opinions, wheels in some iron liberty-grinding or Christianityspinning machine, which we miscall society, or civilization, or worst misnomer of all, the Church!

This I take to be one of the highest aims of woman-to preach charity, love, and brotherhood: but in this 19th century, hunting every where for law and organization, refusing loyalty to any thing which cannot range itself under its theories, she will never get a hearing, till her knowledge of the past becomes more organized and methodic. As it is now, for want of large many-sided views of thepast, her admiration is too apt to attach itself to some two or three characters only in the hero-list of all the ages. Then comes the temptation to thrust aside all which interferes with her favourite idols, and so the very heart given her for universal sympathy becomes the organ of an exclusive bigotry, and she who should have taught man to love, too often only embitters his hate.

I claim, therefore, as necessary for the education of the future, that woman should be initiated into the thoughts and feelings of her countrymen in every age, from the wildest legends of the past to

the most palpable naturalism of the present; and that not merely in a chronological order, sometimes not in chronological order at all; but in a true spiritual sequence; that knowing the hearts of many, she may in after life be able to comfort the hearts of all.

But there is yet another advantage in an extended study of English literature—I mean the more national tone which it ought to give the thoughts of the rising generation. Of course to repress the reading of foreign books, to strive after any national exclusiveness, or mere John-Bullism of mind, in an age of railroads and free press, would be simply absurd-and more, it would be fighting against the will of God revealed in events. He has put the literary treasures of the continent into our hands; we must joyfully accept them, and earnestly exhaust them. This age is craving for what it calls catholicity; for more complete interchange and brotherhood of thought between all the nations of the earth. This spirit is stirring in the young especially, and I believe that God Himself has inspired it, because I see that He has first revealed the means of gratifying the desire, at that very time in which it has arisen.

But every observant person must be aware that this tendency has produced its evils as well as its good. There is a general complaint that the minds of young women are becoming un-English; that their foreign reading does not merely supply the deficiencies of their English studies, but too often completely supersedes them; that the whole tone of their thoughts is too often taken from French or German writings; that by some means or other, the standard works of English literature are becoming very much undervalued and neglected by the young people of this day; and that selfwill and irregular eclecticism are the natural results.

I must say that I consider the greater part of these evils, as the natural consequence of past miseducation: as the just punishment of the old system, which attached the most disproportionate importance to mere acquirements, and those mostly of foreign languages, foreign music, and so forth, while the "well of English undefiled," and not only that-but English literature, history, patriotism, too often English religion, have been made quite minor considerations. Therefore so few of the young have any healthy and firm English standard whereby to try and judge foreign thought. Therefore they fancy when they meet with any thing deep and attractive in foreign works, that because they have no such thoughts put before them in English authors, no such thoughts exist in them.

But happily we may do much towards mending this state of things, by making our pupils thoroughly conversant with the æsthetic treasures of English literature. From them I firmly believe they may derive sufficient rules, whereby to separate in foreign

books the true from the false, the necessary from the accidental, the eternal truth from its peculiar national vesture. Above all we shall give them a better chance of seeing things from that side from which God intended English women to see them: for as surely as there is an English view of every thing, so surely God intends us to take that view: and He who gave us our English character intends us to develop its peculiarities, as He intends the French woman to develop hers, that so each nation by learning to understand itself, may learn to understand, and therefore to profit, by its neighbour. who has not cultivated his own plot of ground will hardly know much about the tillage of his neighbour's land. And she who does not appreciate the mind of her own countrymen, will never form any true judgment of the mind of foreigners. Let English women be sure that the best way to understand the heroines of the continent is not by mimicking them, however noble they may be; not by trying to become a sham Rahel, or a sham de Sevigné, but a real Elizabeth Fry, Felicia Hemans, or Hannah What indeed entitles either Madame de Sevigné, or Rahel, to fame, but their very nationality? that intensely local style of language and feeling which clothes their genius with a living body instead of leaving it in the abstractions of a dreary cosmopolitism? The one I suppose would be called the very beau-ideal, not of woman, but of

the French woman—the other the ideal, not even of the Jewess, but of the German Jewess. We may admire wherever we find worth; but if we try to imitate we only caricature. Excellence grows in all climes, transplants to none: the palm luxuriates only in the tropics, the Alp-rose only beside eternal snows. Only by standing on our own native earth can we enjoy or even see aright the distant stars: if we try to reach them, we shall at once lose sight of them, and drop helpless in a new element, unfitted for our limbs.

Teach, then, the young by an extended knowledge of English literature, thoroughly to comprehend the English spirit, thoroughly to see that the English mind has its peculiar calling on God's earth, which alone, and no other, it can fulfil. Teach them thoroughly to appreciate the artistic and intellectual excellencies of their own country; but by no means in a spirit of narrow bigotry:-tell them fairly our national faults-teach them to unravel those faults from our national virtues: and then there will be no danger of the prejudiced English woman becoming by a sudden revulsion an equally prejudiced cosmopolite and eclectic, as soon as she discovers that her own nation does not monopolize all human perfections; and so trying to become German, Italian, French woman, all at once—a heterogeneous chaos of imitations, very probably with the faults of all three characters, and the graces of none. God has given

us our own prophets, our own heroines. To recognize those prophets, to imitate those heroines, is the duty which lies nearest to the English woman, and therefore the duty which God intends her to fulfil.

I should wish therefore in the first few Lectures on English Literature to glance at the character of our old Saxon ancestors, and the legends connected with their first invasion of the country; and above all at the magnificent fables of King Arthur and his times, which exercised so great an influence on the English mind, and were in fact, although originally Celtic, so thoroughly adopted and naturalized by the Saxon, as to re-appear under different forms in every age, and form the key-note of most of our fictions, from Geoffrey of Monmouth and the medieval ballads, up to Chaucer, Spenser, Shakespeare, and at last, Milton and Blackmore. This series of legends will, I think, as we trace its development, bring us in contact one by one with the corresponding developments of the English character; and unless I am much mistaken, enable us to explain many of its peculiarities.

Of course nothing more than sketches can be given; but I think nothing more is required for any one but the professed historian. For young people especially it is sufficient to understand the tone of human feeling, expressed by legends, rather than to enter into any critical dissertations on their historic truth. They need, after all, principles rather than

facts. To educate them truly we must give them inductive habits of thought, and teach them to deduce from a few facts a law which makes plain all similar ones, and so acquire the habit of extracting from every story somewhat of its kernel of spiritual meaning. But again, to educate them truly we must ourselves have faith: we must believe that in every one there is a spiritual eye which can perceive those great principles when they are once fairly presented to it, that in all there are some noble instincts. some pure yearnings after wisdom, and taste, and usefulness, which, if we only appeal to them trustfully through the examples of the past, and the excitements of the present, will wake into conscious Above all, both pupils and teachers must life. never forget that all these things were written for their examples; that though circumstances and creeds, schools and tastes, may alter, yet the heart of man, and the duty of man, remain unchanged; and that while

"The old order changes, giving place to the new, And God fulfils himself in many ways," yet again

"Through the ages one unaltered purpose runs;" and the principles of truth and beauty are the same as when the everlasting Spirit from whom they come "brooded upon the face" of the primeval seas.

But once more, we must and will by God's help try to realise the purpose of this College, by boldly

[Q. C. LEC.]

facing the facts of the age, and of our own office. And therefore we shall not shrink from the task, however delicate and difficult, of speaking to our hearers as to women. Our teaching must be no sexless, heartless, abstraction. We must try to make all which we tell them bear on the great purpose of unfolding to woman her own calling in all agesher especial calling in this one. We must incite them to realize the chivalrous belief of our old forefathers among their Saxon forests, that something Divine dwelt in the counsels of woman: but on the other hand we must continually remind them that they will attain that divine instinct, not by renouncing their sex, but by fulfilling it; by becoming true women, and not bad imitations of men; by educating their heads for the sake of their hearts, not their hearts for the sake of their heads; by claiming woman's divine vocation, as the priestess of purity, of beauty, and of love; by educating themselves to become, with God's blessing, worthy wives and mothers of a mighty nation of workers, in an age when the voice of the ever-working God is proclaiming through the thunder of falling dynasties, and crumbling idols, "He that will not work, neither shall he eat."

ON THE FRENCH LANGUAGE.

BY

ISIDORE BRASSEUR,

PROFESSOR OF THE FRENCH LANGUAGE AND LITERATURE IN KING'S COLLEGE, LONDON, THE CHARTER-HOUSE, AND THE COLLEGE FOR CIVIL ENGINEERS,

HE who co-operates in a useful work may worthily excite a noble envy. In the accomplishment of his task he enjoys the sweetest of satisfactions; even that which attends the consciousness of well-doing. Penetrated with this sentiment, happy in my mission, I have the honour of opening the Course of Lectures on the French Language, which will constitute a portion of the studies pursued at Queen's College.

In an Introductory Lecture, the Rev. Mr Maurice—worthy interpreter of the "Committee of Education"—has explained, with abundant clearness, the objects of this institution, made known the principles that form its basis, and how, acting in concert with the "Governesses' Institution," with which we are in natural relation, the College signalized its

existence by the creation of "Certificates of Qualification;"—a mean which we hope to turn to the advantage of those who design to become Teachers, and likewise to parents. In these attestations parents will see titles to that confidence, which should always be possessed by the person in whom a mother may repose the care of forming the mind and heart of her daughter.

Further preface being then needless, I begin the particular object appointed to occupy our attention on the present occasion.

The universality of the French language is no longer contested. We have discovered—we have acknowledged, the causes that made it to spread over all the quarters of the globe. These causes are diverse—some are to be attributed to the march of political events, to the successful progress of our literature, and to the advance of enlightenment, of taste, and of civilization among the people of Europe; the others take their origin in the genius of our language.

Needful to Europe, that country of literature, was a language common to all her co-citizens.

For a long time, the learned of this immense country had corresponded in Latin. That custom—useful to them, and which rendered them, in a manner, co-patriots—was far from being equally favourable to the instruction of the rest of readers. Of necessity, it prevented science from introducing itself into the

world, and descending to all ranks of society, and, could it have had permanent continuance, would have divided men into two classes—one, which might have learned all; and another, that must have remained in total ignorance.

The French language, by its precision, its lucidity, and the facility which it offers for the expression of thought, with all the shades that belong to it, deserved the preference;—it obtained it. Ought we to be surprised at this result? Had not French, so to speak, become the usual language of well-educated and cultivated men; and did it not unite in itself, without the inconvenience of being exclusive, all the advantages of the Latin? Its claims to the preference could not fail to be established at an epoch when not one remarkable discovery was made that was not immediately explained and developed in our lan-Essentially sociable, the French language is guage. now found wherever civilization exists. In the drawing-room it is spoken, in the retreat of the study it is written. Leibnitz, the learned Schwab, published several of their works in French. At a later period, the best comic of Italy, Goldoni, appeared with honour upon our scene, after having reformed that of his own nation. The first work of the celebrated Gibbon, an Essay on Literature, was published in French; and it was in French that he began to write his great work on the Decline and Fall of Romea task which he would have achieved, had he not yielded to the wishes of his friends. Hales, Crawfurd, Townley, have left valuable and clever works written in French. In our own time, many have likewise made their pen illustrious by French writings. To name them all is unnecessary; it will be sufficient to add to the above the names of Humboldt, Schlegel, and Lord Mahon, to shew in what estimation talented foreigners held and still hold our idiom.

With its progress and vicissitudes, we need not on this occasion concern ourselves. The history of one language, moreover, is nearly that of all others. It was born,—it lives,—it grows old,—it dies,—like man, society, the world. Nor is it my present design to make the magnificent panorama of the French Parnassus pass before us. In opening this Course,—a course to which pupils of even a tender age are admissible,—it seemed to me that I should commit an error, were I to launch at once into the high regions of literature, without preparing the way by a prefatory discourse on the language and the mode of teaching it.

If the utility of the practical understanding of a language so widely spread as the French, is not sufficient in the eyes of all to make it the object of serious study—if needful for that, are considerations of an order more elevated—they will be found in the advantages which the knowledge of languages in general gives.

"The knowledge of languages," says a cele-

brated writer, "serves as an introduction to all the By it," adds he, "we arrive almost sciences. without toil at an acquaintance with an infinity of beautiful things which have cost their inventors much labour. By it, all times and all countries are opened to us. It makes us in some sort contemporaries of all ages, and citizens of all kingdoms; and it puts us in a condition to converse to-day with all that antiquity has produced of the most learned men, who seem to have lived and worked for us. We find them like so many masters, whom we are permitted to consult at all times;...like so many friends, who belong to all hours, and who can partake in all our diversions; whose conversation, always useful and always agreeable, enriches our minds by the communication of a thousand curious particulars,—and teaches us to profit equally by the virtues and vices of human nature. Without the assistance of language, all these oracles are mute for us-all these treasures are closed to us; and for want of having the key which alone may open the entrance, we live poor in the midst of abundant riches, and ignorant in the midst of all the sciences."

The study of French counts not for little in the efforts of such individuals as desire to obtain this key. In Great Britain, no less than elsewhere, a considerable time is passed in learning our language. This thirst for instruction nothing has yet been able to extinguish;—not even the disgust,

which cannot but be felt by so many students, who pass from one method reputed excellent to another which they are assured is marvellous; but who find nothing excellent in that, nor marvellous in this. Nothing thereby daunted, however, and disdaining to be repulsed, they proceed to try several others more or less calculated to seduce a confiding public. Amongst these systems, elements the most heterogeneous, there is one which, having enjoyed the greatest favour, merits to be particularly mentioned: I mean that of Hamilton. That innovator. raised from the beginning upon a high pedestal by the favour of the public, has not maintained his position there; and as statues, once on the ground, rise no more, his fall was irreparable. Let us relate to what in the beginning he owed his celebrity in the two worlds, and what have been the causes of the oblivion into which he has fallen.

Hamilton made his pupils enter a new path; lightened of the burthen with which they had been but lately charged, they promised themselves an easy and rapid march. A truce to metaphor,—he pretended to lead them to the understanding of languages without the aid of elementary books.

No more was required to arouse the attention of the public, everywhere eager for novelties; and when the press had made known the judgment pronounced loudly in favour of his method, the public, misled, ran in a crowd to his lectures. What a blessing to men of an anti-philological turn,—such as may be met with! Thanks to their new guide, they were now, in the study of the French language, able to make an immense holocaust of all elementary works!—works, which to them had been the source of so many moral tortures, from the Grammar of Chambaud to that of Louis-Philippe de Porquet!

Such is, in my opinion, the origin of the reputation once possessed by Hamilton. The causes need not be further investigated. His method at first allured the major part of the world, enemies to labour, and misers of their time. Why was the charm in all places of such short duration? Why did Hamilton see the crowd which he had drawn to his lectures so soon disperse? This is what we shall presently see.

Hamilton was an innovator. "Innovators," says Michel Chevalier, "are always the dupes of the same illusion,—they believe themselves to be miraculously endowed." Hamilton promised great things:—these promises, however, were followed but by ordinary results. In a word, he pretended to teach *speaking* in an exceedingly short space of time; whereas, in fact, he only taught translation.

Now, there is no professor of any experience who knows not that to the English beginning to learn French, the most easy thing is to translate simple prose—such as "the Gospel according to St John," or the "Fables of Perrin;"—and of course translation is the labour to which they most willingly devote themselves. The simplicity of our language—the arrangement of the words according to the natural order of ideas—the logical analysis which governs it, and which makes it the most philosophical of all languages, renders the translation of it easy, particularly to the English, who acknowledge a multitude of words of Latin or pure French origin. "You can," says a distinguished critic, "write in English a Latin,—French,—or German book;—so essentially is the character of this language composite." He gives two sentences as examples of this—one Anglo-Latin, the other Anglo-French. Here is the first:—

"The elements of the operation assume a new aspect and form; they coalesce and unite with rapidity."

All the dictionary words of this sentence are Latin:—elementa, opus, assumere, novus, aspectus, forma, coalescere, unitas, rapiditas.

The second is constructed thus:-

"The author's manuscripts have perished; and the cause of that event is a total indifference to their contents and ignorance of their value."

Here there are only French words:—employed, not in a Latin but in a French sense:—

Auteur, manuscript, périr, cause, événement, total, indifférence, contenu, ignorance, valeur.

It is not then by translation that we can test the value of a method of teaching—(at least with regard to the English who learn French). A method by which translation is taught, is fitted to teach the dead languages; but it will not fulfil the object of persons who would acquire the living languages, not only to translate but also to speak them.

To these remarks upon Hamilton's method, I will add a few others upon that of Dufief.

Dufief fell into a different error. He is one of those theorists to whom it is in vain to talk of the modifications rendered necessary by the disparity of age, the different degrees of capacity, or the greater or less progress already made. He lays down as a principle, *Unity in Instruction*. No consideration will make him recede from this point. This is what he himself declares in these terms—

"Dufief's Plan.

...its great principle being the concentration or unity of instruction, it embodies the numerous classes essential to other schools into one general class, regardless of the number, progress, ages, or various capacities of the pupils." (Introduction to Dufief's Nature displayed, the 8th Edition, Vol. I. p. cxx.) After this were it wrong to compare him to a gunner who charges pieces of different calibre with an equal quantity of powder, and pretends to make them carry the same distance? Or, again, to that artizan who, working upon a fixed principle, without troubling himself about the deformities of nature, obliges the foot to fit the shoe? The justness of these comparisons will, I trust, warrant their introduction here.

Of the truth of the remark already made, that innovators are always the dupes of the same illusion, Dufief furnishes a striking proof, when he perceives in his system a danger for the nationality of people; -the acquired language not failing, in his belief, to become, by means of his method, more natural and more familiar to those who learn it than their own language, which consequently it soon supplants. "This method," says he, (Vol. I. Preface, p. xvii.) "by being rendered more powerful—which can easily be done by following up the principle on which the whole system hinges-would, in a short time, make the language to be taught supplant the native language, by rendering the former more natural and familiar to them than the latter, the influence of which would be continually diminishing. A conqueror might even, by this means, extinguish the language of the conquered, and substitute any other suited to his political views. But God forbid that such a measure should ever be resorted to with the help of the means afforded by this work."

Before passing to another part of my subject, I hope you will grant me permission to mention another piece, much more curious than the preceding one. It is by a Grammarian who, in the ingenuity of the means which he employs for attracting the public to the parts of speech, leaves far behind all his predecessors. He introduces himself with an inspired grammar, not by some obscure divinity, but by one from the summit of Olympus—no less than Minerva herself. Judging by the style in which he relates the affair, (see Le Harivel's Grammar, pp. 6—7), the rules of our Syntax, such as are understood in Olympus, differ materially from those which were observed by Boileau and Racine. I profess a great respect for Minerva; but certainly I shall not place her grammar in the hands of my pupils.

But, after all, you say, what are the most sure, the most efficacious means of arriving at the knowledge of the modern languages? I only recommend two. The first is not disputed; it is to learn them where they are spoken:—the second is, to study their principles. For those who have not the advantage of daily practice with French people, I consider the study of the elements as an indispensable labour; and I have not arrived at this conviction lightly. During a long series of years as a professor, I have been able by experience to test many theories, judging them by the results of their application; and by that I have become convinced that the best plan for a master to pursue is to teach the construction of the language in the Syntax, and to enjoin the practice as much as possible of the theory thus acquired.

Our Syntax prepares, so to speak, the student for the peculiarities of the French phraseologya phraseology which is perfectly idiomatic, and upon which exercises are indispensable. The utility of practical exercises upon our idioms is daily felt by those who have an opportunity of observing how frequently expressions are heard in the mouth of the French, the figurative sense of which would not be understood by a stranger who hears them for the first time. How, for example, would he know, that "Vous êtes orfèvre Mr Josse," means "You do not speak disinterestedly,"-that "à la querre comme à la guerre," is equivalent to "let us be pleased any how," in the mouth of people who accommodate themselves with good humour to circumstances? Would be understand, that "Elle a été à la fontaine de Jouvence," signifies "She is looking younger again," - that "jetez-vous votre langue aux chiens," means "Can't you guess? do you give it up?" When he hears said of some one, that he is "tiré à quatre épingles," would he be able to guess that it means "neatly dressed?" If any remarks to him that there are "fagots et fagots," would he know that it was equivalent to "all men or things are not alike?" Again-Agnès, the heroine of one of Molière's best comedies, is a model of simplicity:—thence the expression, "Elle fait l' Agnès," in speaking of a girl who affects a simplicity which is not natural to her. But how

would an Englishman, without explanation, see in the proper name of Agnès, thus applied, the synonyme of 'simpleton?'

From this class of phrases, which belong especially to our own idiom, I pass to the familiar proverbs in the two languages. Although they do not speak more commonly in France than in England, like Sancho-Panza, in proverbs, still a great number of them slip into familiar conversation, and consequently it is not without advantage to assign these a place in a collection of idioms. The following are a few, which I will give as examples in the two languages:

A good name is above wealth.

Sorrow treads upon the heels of mirth.

Forewarned, forearmed.

Love me, love my dog.

Smooth water runs deep.

Ill weeds grow apace.

As you have brewed so you must drink.

It is an ill wind that blows nobody good.

A burnt child dreads the fire.

Bonne renommée vaut mieux que ceinture dorée.

Tel qui rit vendredi dimanche pleurera,

Un bon averti en vaut deux. Qui aime Bertrand aime son chien.

Il n'y a pire eau que celle qui dort.

Mauvaise herbe croît toujours. Comme on fait son lit on se couche.

A quelque chose malheur est bon.

Chat échaudé craint l'eau froide.

There is another class of idioms—the most important, not only because of its being by far the largest, but likewise that it comprehends all those

expressions peculiar to French phraseology that cannot be placed among either of the preceding classes—such are the following:

He is whimsical.

They lay all night in the open

Nothing better can be done.

What business had he there?

Let us resume our discourse. Let us return to our work.

He lives there in clover.

Do not rail at him.

He assumes consequential airs.

He is a great bore.

All that is idle talk.

He says it on every occasion. Insensibly, he told us the

whole affair.

I found nobody there. Seize the opportunity.

We shall have a small party of friends.

He loves his business.

He is fortunate.

I do not know my way. He breaks every thing he

touches.

It is a borrowed name. He is no conjuror. Il a des lunes.

Ils couchèrent à la belle étoile.

Après cela, il faut tirer l'échelle.

Qu'allait-il faire dans cette

galère ?

Revenons à nos moutons. Reprenons le collier de misère.

Il y est comme le poisson dans

l'eau.

Ne lui marchez pas sur le pied.

Il fait le gros dos; ou, il tranche de l'important.

C'est un homme assommant.

Autant en emporte le vent. Il le dit à tout bout de champ.

De fil en aiguille, il nous raconta toute l'affaire.

J'ai trouvé visage de bois.

Saisissez la balle au bond. Nous serons en petit comité.

Il a le cœur au métier.

Il est né coiffé.

Me voilà tout désorienté.

Il a la main malheureuse.

C'est un nom de guerre. Il n'a pas inventé la poudre. A word now on pronunciation and prosody. Because "prosody," says l'Abbé d'Olivet, "teaches us the just quantity of syllables, it is therefore useful—it is indispensable to good speaking." Good pronunciation is not less necessary for rendering language intelligible, than for speaking with grace and dignity. But what is required to render it such? To give to each syllable the sound that custom has assigned to it; to avoid letting the terminations be heard which ought not to be pronounced; not to make long syllables short, and short syllables long;—in brief, to articulate the words with precision.

But, as D'Olivet remarks, in order to possess a good pronunciation, it is indispensable to be well acquainted with prosody; that is, the art of giving to every syllable the tone that belongs to it: in fact, the music of the language. This is true, as it is true also, that the absence of prosody which is felt in our own, is a great obstacle to the English who wish to speak it perfectly. The habit which we contract in speaking our native tongue prevents us often from catching the inflexions of the voice peculiar to the language of every nation the pronunciation of which appears to us defective. It is, moreover, among men that the want of submission to the rules is mostly observed. In general, the ladies accustom themselves more easily to a subjection to which all languages are submitted.

[Q. C. LEC.]

But, whatever may be the cause of these obstacles, -are they invincible? Is the pronunciation of French, as is too slightly said of it, thickly beset with difficulties? By no means. All the sounds, with some few exceptions, (u, gne, ail, and the nasal vowels, for example,) which enter into the composition of French words, have equivalents in Or even if some shades render the the English. analogy imperfect, they are so slight that it is only necessary to give a little attention to them to make them disappear. I repeat it, for the English, the greater part of the sounds which they find difficult in our language are easy to them, when they have the firm will to submit themselves to the rules that custom has established. Do you wish a few examples in support of my assertion? I will take them from among the most easy sounds, but in which, nevertheless, we have the most frequently to correct our pupils. I begin with the diphthong oi, as in le roi, la loi, la foi, moi. There is no difficulty in pronouncing that sound; and yet what pains are we not obliged to take before our pupils cease to pronounce them le rô-a, la lô-a, la fô-a, mô-a? I proceed.

The compound vowel eu is pronounced nearly like an e, but with the sound prolonged. p-e is pronounced $p\check{e}$, p-e-u, $p\bar{e}u$. One might say, there was the same difference between the one and the other, as there is in English between to and too;

one is short, and the other long-as cheveu, neveu, le peu. In short, there is really no difficulty, and yet among our young pupils, for cheveu we hear most usually chevoo, for neveu, nevoo, for peu, poo, or pew. Again: in the beginning, and often in the middle of words, the letter r is pronounced in English as in French-rest, respect, reverence, reprehension. Between a vowel and a consonant the English take away nearly all its value: the French make it double. This is a difference which custom establishes; there is no difficulty in it, and it is quite as easy to say parler as paler, argent as agent, garçon as gāçon. The nasal vowels are long in French, la honte, une pompe, nous rompons, &c. This is not difficult; yet what trouble we have to prevent our pupils from saying la hunt, une pumpnous rumpons, vous rumpez, ils rumpent. I will not multiply these examples. I will only remark here, that the same causes which corrupt the French pronunciation by the English, produce with the French who exercise themselves in the language of this country not less remarkable results. convinced of this, it is only necessary to visit, not far from this spot, the ordinary rendez-vous of the cosmopolitan votaries of the culinary art. the French call the attendant "Waitaire," the English Gāçon;—each apparently quite self-satisfied—the Frenchman because he feels assured that he is taken for an Englishman, and the Englishman because he thinks that he is keeping up his French.

We ought not to omit to inform foreigners, that there are in French three sorts of pronunciationconversational, reading, and declamatory. The pronunciation of public speaking is a sort of song, every tone is modulated. The pronunciation of reading ought to be less marked; but it ought to be indicated in an obvious manner. Good reading requires that the true value shall be given to each Nevertheless, it is not proper to make reading like declamation. In declamation a man is beside himself;—he is identified with the feelings which he expresses, and which he wishes to communicate to the souls of others. But in reading one is cool, and notwithstanding one feels emotion, this emotion does not carry us so far as to make us lose our self-possession. To declaim in reading is, then, to read badly.

The conversational pronunciation differs from the two others;—the most part of the syllables appear then shortened. This pronunciation has no other laws than custom. It can scarcely be obtained in a foreign country but by the habit of living with persons well educated, or by the care of a master who has lived in good society, and has moreover cultivated his mind and language. The pronunciation of conversation, says a grammarian whom I have already cited, permits a number of histuses,

provided that they are not too abrupt. They tend to give to the discourse a natural air. The conversation of persons who have lived in high society, moreover, is filled with intentional hiatuses, which are so much authorized by custom, that to speak otherwise would be pedantic. Among these peoples he adds, folatrer et rire, aimer à jouer, are pronounced folatré et rire, aimé à joué.

For the students who are sufficiently advanced, the passage from the language properly speaking to the literature cannot be better marked than by dictations, on the French writers who have thrown the most éclat upon their country, and added new treasures to the riches of our literature. An abridged course thus carried out is calculated to arouse a desire to read our authors. Too often it happens that those who have acquired our language, stop there, instead of making use of it to gather, in the vast field which is then opened before them, the fruit of their labours. "It is," as my predecessor in another place has spoken of it, "as though a man, on being told that a beautiful prospect was to be enjoyed from a hill, were to ascend it, and having, with much labour, reached the summit, he were to close his eyes to all the beauty around him, and to walk down again, as if his motive had been, not to enjoy the prospect, but to ascend the hill." The consequence of such conduct is that our best authors are only known to a very few of

those who learn our language. The great literary names, it is true, are familiar to all. It is known, for instance, that Pascal and Buffon are two celebrated prose writers; -but few, very few have received by the perusal of the former the profound impressions his thoughts leave in the soul, which it purifies and elevates;—few have ever admired in the pages of the latter the models of eloquence and of taste which he has inscribed there. Every one knows that Corneille and Racine are our greatest dramatic poets; but every one does not know the innumerable traits of genius, the creations of the former; nor the pictures given by the latter, so harmonious and so true, of the weakness of the human heart. They admire the graces of the epistolary style; they taste the charms which they diffuse over the correspondence of the well-educated French:—but do they seek to imitate them?—to form their own style by studying the models in this kind which Madame de Sévigné has left? And if it is true that even the chefs-dœuvre of the great writers who made the epoch of Louis XIV. illustrious, are so little read in this country, one cannot be astonished that it should be the same with the modern writers, and that the most beautiful pages of Chateaubriand and of Madame de Staël, should only be read by a very few persons. the preceding remarks also apply to our historians? I think so, and yet where could any be found

more attractive than our own? Thierri, Daru, Fontane, Barante, Ségur, Michelet, Thiers, have no superiors in the art of writing;—and have Lacretelle, Guizot, Capefigue any?

The immoral tendency of most works of fiction published in our day—(a tendency which no one deplores more than myself)-makes the reading of The condemnation is just; -but them forbidden. ought it to extend to all indiscriminately? because in the works of Balzac, George Sand, Eugêne Sue, Dumas, and others, there are found seeds of corruption for mind and heart, ought the charming pages of La Martine and Alfred de Vigni to be proscribed?—However that may be, I ought to declare, in coming to a close, that our lessons in literature shall be purely classic-and as long as I shall have the honour to give them, the attention of the pupils shall only be directed to those works which might all bear as the motto to their title-page,

La mère en permettra la lecture à sa fille.

ON THE GERMAN LANGUAGE.

BY

ADOLPHUS BERNAYS, PH. DR.

PROFESSOR OF THE GERMAN LANGUAGE AND LITERATURE IN KING'S COLLEGE.

LTHOUGH it has been arranged that every one of the courses to be given in this College is to be commenced with an Introductory Lecture, let it be noticed that it is not our intention to instruct our future pupils by means of what is commonly understood in this metropolis by the term of lectures. Oral instruction, to which the students have only to listen, or whereof they at most take notes, may have been necessary in times when books were scarce, and the number of those who could teach few in proportion to the number of learners. It is also required now when the knowledge cannot be imparted without experiments or costly drawings and specimens. But when books on every topic are abundant, and students have ample opportunities to prepare themselves for their classes, the professor will in general be much more usefully employed, if he guides their studies by telling them how to use their books most advantageously, setting them tasks to be performed,

examining and correcting their work, and—whenever feasible—inducing them to put the knowledge they thus acquire to immediate practice. Such will at all events be the course I shall myself pursue, and which I have found from practice to be the most efficacious in teaching languages.

The present lecture, therefore, is not to be regarded as a specimen of the method I intend to follow: nor do I mean it to be a display of erudition on German literature. For what could I tell those who are already familiar with the German language and its best writers, with which they are not already acquainted, or which they might not read at their leisure in the numerous works expressly written on this prolific subject, many of them by first-rate critics, whose learning, acumen, and eloquence I could never hope to emulate? Besides, what could I offer in the short time allowed me on the present occasion, but a few generalities, which, unless dressed in the brilliant language of a Carlyle or an Emerson, would not be worthy of their atten-Nor shall I attempt to meet those who, possessing but a partial knowledge of the matter in hand, may have come here in the expectation that the lecturer would take up the subject somewhere about the point they may have respectively reached themselves, and thence lead them farther. depently of the impossibility of satisfying at one and the same time persons in such various states of

progress, I should, in trying to gratify them, be unjust to those to whom the subject is altogether new, and who have come here to-day for information on its first elements. They probably wish to hear what sort of language it is they are called upon to study, what affinity it bears to their own and to those which young ladies are generally in the habit of learning. They will, no doubt, like to be told of some of the advantages they may derive from its acquisition, of the method I intend to pursue in my teaching, and what efforts I expect in return on their parts in order to do justice to my instruction. All this is, no doubt, very simple and common-place. Yet as I cannot expect to please all, it is but just, and in harmony with the whole plan of this institution, that I should endeavour to give the required information to those who most want it. same time, I hope that the better informed will leave this place satisfied that, if at a future time a class of ladies can be brought together who are prepared for a higher degree of instruction, they may obtain it in this institution.

The German language then is a member of a large family of languages, now generally comprised under the title of Indo-germanic, which having apparently taken its origin somewhere about the Caucasus, spread on one side through Persia to India, and on the other over the greater part of Europe, embracing even the languages of Rome and

It is, however, through a deep study of the structure of language generally, that its affinity with these two classical languages, and still more with the Persian and Sanscrit, can be traced. its close relationship to the extinct dialects of the Goths, Franks and Anglo-Saxons, as well as to the living languages of England, Belgium, Holland, Denmark and Sweden, is evident at the most cursory glance. It is, moreover, an original language. Not that it has not borrowed many words and even idioms from others, or that other languages have not exercised any influence on the structure of its phrases and even words; but that an immense majority of its terms are derived from roots and stems still in common use in it, by means of prefixes and affixes springing from its own store, and on principles peculiarly its own. A language of this kind offers at least this advantage, that, as its primitive words, together with the syllables employed to enlarge its vocabulary, are comparatively few in number, the student needs but master them, in conjunction with the laws which regulate the derivations, in order to seize on the meaning of almost all derivative terms at first sight or hearing. He will thereby learn with how few primitive sounds, either imitated from or applied to the simplest actions, motions and utterances of natural objects, the genius of man has contrived to express the whole range of his ideas. He will discover, how words in their primary form

have but one meaning, and that this meaning, although we are compelled to use various terms for the same notion in different combinations, is hardly ever entirely lost. Even words now entirely devoted to the expression of mental or spiritual ideas may often be traced back to their original physical signification; and the student will look more deeply and with a wonder bordering on awe on a faculty, which is able to grow unconsciously and as it were organically, or with a necessity similar to that with which a plant unfolds itself from a single seed, into such a power.

This circumstance gives also, if I may say so, a picturesque appearance to the language; since terms which express abstruse notions, and which in other languages are but arbitrary signs for the intellect, often present themselves in German as figures to the imagination. Yet pleasing as this may be in itself, and however much it enhances the interest of poetical and imaginative writing, it has also its disadvantages. In philosophy and science, where precision of language alone can prevent confusion of ideas, words are preferable which are confined to the conception they are to represent, and will not awaken in the writer or reader notions foreign to the matter, and therefore calculated to throw a haze or cloud over the subject under discussion. philosophers and men of science have therefore adopted many Latin and Greek words as technical terms. Many French and some Italian words and turns of expression too have been introduced, partly through the affectation of fashion, partly with the things and notions that were brought in with them. A great many new terms also came in with Christianity, many of which, such as Priester, Kirche, Altar have been so germanised as to have nearly lost their foreign appearance. Learners are often told that they should eschew all foreign words, as the German language was rich and flexible enough to dispense with them, and they are presented with large volumes in which these foreign intruders are registered. and other terms are appended as their substitutes. There are no doubt many, the adoption of mere caprice, which might be fair subjects of a comprehensive alien act. But the great majority ought, for the reasons already stated, or because no fair equivalents have as yet been found for them, to be retained and treated on a par with native words. At all events, if a foreign student recognises them as old acquaintances, they offer to him at least the advantage that he has not to learn their meaning. For although the English learner will discover an infinity of words in German which now exist in English, or are at least in use in one or other of the British provinces; still they generally differ so much in form, that it will take some time before, under these new faces, he will recognise his old friends.

What is, however, of infinite advantage to the

classical scholar, or even to persons who thoroughly know the derivations of English words taken from Latin, is the fact that so many derivative and compound words in German are literal translations from. and imitations of, the Latin. Such a one, as soon as he knows the meaning of the component parts, needs but to see such a word, to know and feel at once its signification and to select the right English word that will render it. Such are absetzen, to depose, to deposit; aussetzen, to expose; einsetzen, to institute; nachsetzen, to postpone; abwenden, to avert; annehmen, to accept; ausnehmen, to except, &c. Many of these have no doubt been made in recent times, and their number is daily increasing; but the great mass of them was formed by the Italian and Gallic missionaries, who first introduced Christianity into Germany, and by subsequent ecclesiastical writers on whom the early instruction of its people devolved.

Now as regards the inflections which express the relations of words among each other, they are not so numerous as they used to be in the older dialects now extinct, and far less complicated than in the Greek and Latin, and (as regards the verbs) even than the southern languages of Europe. But they are more numerous than in English, especially as the substantives, adjectives, and pronouns vary in their cases. This circumstance, no doubt, at first offers some difficulties to the student. But the

language itself derives a considerable advantage from For if the relations of words to each other are not indicated by internal or external changes, the only means of indicating these relations is by a careful and unchanging collocation of the words in a sentence. But the more numerous and distinctive those changes are, the more free and varied will be their position, and a poet or orator will never be impeded by any rules but those of harmony, emphasis, and innate propriety. For instance, the phrase "Revenge reaches the tyrant," would in English have only this one form, if you would not be misunderstood; but in German you may say, with equal certainty of conveying your meaning, Die Rache erreicht den Tyrannen; or, Den Tyrannen erreicht die Rache; and the latter would be clearly more emphatic than the former.

In the declensions, however, only four cases are distinguishable, and these not always. The verbs have only the same number of simple tenses as the English, the persons being but slightly marked; and the compound tenses are formed on the same principle as in this language. There is also but one regular conjugation, and in the irregular verbs, the irregularities are almost entirely confined (also as in English) to an internal change, viz. of the vowel of the root in the imperfect and participle, as give, gave, given, geben, gab, gegeben; break, broke, broken, brechen, brach, gebrochen.

The celebrated Grimm, indeed, has by his profound researches brought to light the remarkable fact. that as languages were in general richer in grammatical changes and inflections in their early stages. they more particularly varied in their conjugations. These, however, became gradually less numerous, till four, three, or even one new form would take their place, and would on that account be called regular. while the comparatively few verbs which happen to retain the ancient forms are called irregular. Now it is deserving of notice, that as the past participle and imperfect of the English regular verbs are marked by a d, and the German by a t, (the English language in fact mostly prefers the softer consonants) this regularising of the language must have taken place more than twelve centuries ago, as the Anglo-Saxons must have brought their d over with them when they went forth to the conquest of Britain. For practical purposes, indeed, the old appellations of regular and irregular verbs are more appropriate than those of ancient and modern. Yet the fact is so striking that I thought it worth mentioning.

The German is less definite in its tenses than the English, as it never employs the verb to do as an auxiliary, nor to be with the participle present. It also misses the verbal substantives in ing, which prove so very convenient in English. On the other hand, the auxiliary verbs, must, may, can, shall,

will, &c., so defective in your language, are perfect in German, and enable us to give them all the tenses peculiar to other verbs. But this very perfection offers difficulties to the English learner, who is seldom sufficiently acquainted with the nature and force of these peculiar verbs in his own language, to make him clearly understand the tenses your often-paraphrased forms are meant to represent.

And let it be remarked here, that a sound know-ledge on this point will be of the greatest use, not only in learning German, but in the study of any other language. For example, if you understand that I shall be obliged is the future present of the verb must; I was to have written, the pluperfect of ought, before the infinitive write; I could have (according to circumstances) the pluperfect of the indicative, or of the subjunctive of can, you will readily say in German:

Ich werde müssen; Ich hatte schreiben sollen (for gesollt); Ich hatte, or hätte gekonnt. But you will also in French use the correct expression: il me faudra—j'ai dû écrire—j'avais or j'aurais pû.

And, as this is a place more especially intended for the training of future governesses, allow me to state here a deficiency I have met in almost all the pupils I ever had to instruct, viz. that the English language is hardly ever taught with a view of facilitating the acquisition of foreign languages. I mean to say, the attention of pupils is hardly ever drawn

to the important fact, as to whether words are used in a natural, derivative, or figurative sense; or whether they have altogether lost their logical significance, and being as it were arbitrarily clustered together into a phrase, are in that combination made to express a thought foreign to their original meanings. For instance, in the phrase just mentioned: "I was to have written," was loses altogether its meaning as the primary verb of existence, or of a copula, and receives that of ought, shall, or must, by which it will have to be rendered in every other language. Take the phrase, How do you do? Neither how nor do are employed in their primary sense, and it is ten thousand to one, that if you were to translate it literally into any language, you would not be understood. Yet if a young person knew the fact, that it was merely a conventional expression, that it meant, How is your health? though she might not know that she must say in German, wie befinden Sie sich, or wie geht es Ihnen, or was machen Sie? and in French, Comment vous portez-vous? yet if she were to ask a German wie ist Ihre Gesundheit? or a Frenchman. Comment est votre santé? either would know at once what was meant.

To return however to our subject—the characteristics of the German language.

It has been stated before that its roots and stems are few, but that its powers of combination are infinite. Hence, among other classes of words, have arisen an immense number of compound verbs. Those which are compounded with unaccented particles must certainly, for the most part, be learnt like roots; as those particles, on account of the great antiquity of their origin, are obscure in their signification. a far greater number are compounded with adverbial particles (for the most part prepositions), which, although prefixed to infinitives and participles, are placed after the verb in the present, imperfect, and imperative, and often removed far from it to the end of the sentence. This no doubt is a difficulty, which, however, vanishes, as soon as the student has become familiar with the general principles of construction. It must at the same time be confessed. that these are themselves complicated and fanciful, and the less necessary, as the language long existed with a much more natural collocation of words in the sentence.

In consequence of a predominance of consonants, and the frequency of short unaccented syllables, the German cannot be called a melodious language. But, in consequence of the clear significancy of many of the prefixes and affixes, and of the stress of the voice almost always resting on the root syllable, there is a happy correspondence between thought and sound, which renders it peculiarly harmonious and well adapted for song. This harmony, too, is more apparent in our poetry than our prose. Not as if German prose were not capable of a beautiful

thythm, but that in comparison with poetry, it has been little cultivated, and circumstances have been adverse to its development. In the first place, Germany has little of that society which simplifies and polishes a language through conversation. the next, its political state and institutions have. till very recently, been such as to preclude public speaking, by which a language, without losing the flexibility and elegance it may gain by the former method, acquires variety, harmony, and vigour. But what has injured it more than all, is the fact that most of our writers, having lived in seclusion and being more intent on the matter they wished to convey than on the manner of its conveyance, have generally been careless of their style. It happens therefore rather too often, that their periods, by their length and intricacy, offer difficulties not inherent in the subject, and which with more care and some practice might have easily been removed. You even meet at times with obscurities, which you cannot help suspecting of being purposely introduced, in order to give the works in which they appear an air of profundity. And what is a greater evil still, is, that scarcely has a new metaphysical system become fashionable, when its abstruse terminology is straightway introduced not only into all branches of science, but even into history and the lightest literature of the day. Nay, you may sometimes meet with and be puzzled by it even in

common advertisements. And these are really the difficulties of the German language which must be encountered and grappled with; but which will not prevent a person of moderate talent and diligence from writing and speaking the language, and understanding a well and simply written work in quite as short a time as it would take such a person to acquire the same degree of proficiency in any other modern language.

Now the advantages of studying this language are manifold, not to speak of its being the fashion now-a-days to know something of German; for that alone would be a poor plea. But with the present state of intercourse between nations, it would at one time or another prove highly inconvenient to most persons of the wealthier and educated classes, not to be able to speak a language spoken by probably more than sixty millions of people-not only in Germany itself, situated in the very heart of Europe, and extending through the whole of its breadth, but also in many parts of Hungary, Transylvania, Poland, Russia, and even in the United States of America. For in all those countries there are millions of German settlers who have retained their native language often without speaking any other, and for whose use many newspapers and other periodicals are there published.

But what is still more important, is the German literature. Although of a late growth, it equals in

magnitude and extent, profundity and variety, originality and beauty, that of most nations who have cultivated the Muses, and gained celebrity many years, even centuries, before, and it surpasses that of several. Owing to a series of political complications acting on its social state, to a long-extended predominance of a spirit of clanship among its learned professions, and in part too to the great dissimilarity of its language to the Latin-the universal language of the learned of all countries-England and France, Italy and Spain, had nearly all gained the zenith of their literary renown, when Germany but entered the arena. It had, indeed, made several literary commencements at various periods; and at one time, during the 12th and 13th centuries, under its powerful emperors of the Swabian dynasty, it possessed a poetical literature which might vie with that of every nation of the middle ages. With the fall of that family and the subsequent distractions of the country, however, the culture of letters ceased: and the dialect in which those works were written becoming obsolete, they were gradually forgotten; and when with Luther and the Reformation the vernacular tongue was again extensively employed in writing, the language to be employed had in a certain measure to be first created. Yet even this stirring time failed to produce classical works, with the exception of Luther's admirable translation of the Scriptures; nor was the following century more

fortunate. We have, in fact, no work written in the present language, and to which we could direct the general reader, of an earlier date than the middle of the last century. Klopstock's Messiah is, indeed, the first which obtained a European celebrity, and which retains in Germany itself a classical character, and, together with the Odes of the same author, still finds readers. Contemporaneously with him, and long before he retired from the stage of his activity, appeared a host of writers, who, in a period of less than a century, have rendered German literature celebrated all over the world. had struck two chords, religion and nationality, which vibrated through the hearts of his countrymen from one end of Germany to the other. appealed to the common faith, and the common ancestry of the whole people, and as all felt his powerful appeals ringing through their inmost souls, a consciousness arose among them that, notwithstanding all political divisions, the nation was bound together by one common tie-its language. It may, however, be readily imagined that such a mighty commotion among a people naturally ardent, but who had been plunged in the inertness of exhaustion after long and arduous struggles, gave rise, amidst much that was good and praiseworthy, to a host of the most exaggerated and extravagant productions; indeed, it was only owing to the coolness, judgment, and critical acumen of a Lessing, that German literature at that moment did not exhaust itself in a momentary effort. Although his own literary productions are not of first-rate excellence, he has certainly been unsurpassed as a sound critic, and as a judicious guide to other writers. His Laocoon, which has been translated into English, will amply bear me out in this assertion. happened also about the same period, that the sciences began to emancipate themselves from the trammels of the schools, its votaries being incited by the brilliant discoveries and labours of English and French philosophers. Law, Medicine, Physics, and, above all, mental and speculative Philosophy, took a new start; Theology was roused from her long slumbers; there was a universal cry for light and for truth. And although in this general chase many a meteor was mistaken for a fixed star, and many an ignis-fatuus used as a lantern for the feet, and the luckless pursuers were often led into quagmires instead of the pleasant fields they were striving to reach; although in the universal digging and delving after truth many base metals were brought up and received by the masses as pure gold, and in the general bustle many a safe luminary was lost sight of, and many precious jewels and grains of gold thrown away with the accumulated dross of ages with which they were confounded; still the productions of German industry, talent, and genius in all the departments of human knowledge that have

appeared since that time, and are still appearing, are so important that they alone would render the study of our language of almost universal necessity. But the effects of these stupendous labours on German literature are incalculable, and have scarcely yet been sufficiently appreciated. most probable that without Klopstock and Lessing, Germany would scarcely have had a Herder, a Göthe, a Schiller, a Tieck, or a Bürger, and that other host of writers whose names are in everybody's mouth, if their works are not in everybody's hands. But it is quite certain that without the labours of scientific men and critics, these would never have attained the eminence to which they have reached. Göthe tells us himself how much he owed to the labours of Winkelmann, in the elucidation of the remains of classic art; and how Schiller's mind was moulded by the works of Kant, is known to every student of German literature. Indeed, Herder and the two Schlegels are greater as critics or philosophers than they are as poets. But I should be obliged to detain you for many hours, were I to enter into any details of this vast subject. The literature of Germany is before the world, and its influences are felt in every quarter. Its merits may be at times over-rated, but it cannot be ignored: it must be looked into, and no person will be considered fully educated, who cannot read it in the original. There are indeed no

few, nor those among the worst, who are afraid of German literature, and still more of German science, especially theology. This is not the time, nor the place, to enter into a controversy on these matters. But I may affirm that even these opponents will be compelled in self-defence to acquaint themselves with the writers they would put under a ban. There are, no doubt, dangerous writers in Germany; but there are also hosts of discreet, pious, and clever men there who oppose those writers; and as the modes of attack are peculiar to Germany, being founded on the philosophical systems that have from time to time prevailed in its universities, the modes of defence proceed on the same foundationso that, for instance, any one who would wish to controvert effectually the bold and subtle attacks on Christianity by Strauss, must be well versed in the philosophy of Hegel, out of which armoury the assailant has drawn all his weapons.

I may however say in this place, that young people, and especially ladies, should be guided in their reading of foreign writers in the same way they are generally directed in the selection of books in their own language. There are many works by English authors, which no judicious person would place in the hands of those whose judgment is not matured, and whose character is yet unformed. But, unfortunately, this precaution is not always extended to foreign authors. Young people are frequently

allowed, or even induced, to peruse books unsuited to their faculties, and which often the authors themselves never intended for them. It is indeed one of the causes which have created so great an outcry as to the difficulties of the German language, that persons attempt to read books in German on matters which they would consider beyond their powers in English. "Strong meat for men, and milk for babes," ought also to be the motto here; and I shall consider it a special part of my duties, in this institution, to teach my pupils how to discriminate in the choice of authors and books.

There remains yet an advantage in the study of the German language, which I would particularly mention in this place. It is this: that as one never learns the grammar and genius of one's own language so well as by comparing it with those of another, so no grammar forms so suitable a basis of comparison as that of a kindred language, especially if that grammar be more complicated than our own. Every one knows too what a powerful instrument for the training of the minds of boys is the study of the classical languages. Every faculty is called into play: especially memory and judgment. It is not enough that boys ransack their dictionaries for the signification of words, they must remember all the inflections, all the rules of syntax, the niceties of particles, and consider the relations of subject and object; they must by turns generalise and apply

principles to particulars, in order to arrive at the exact meaning of authors. Now the German language may be used in the same manner, as a formative vehicle with ladies; with the peculiar advantage for them, that we have a great variety of works, in every branch of literature, which we may read with them with safety, profit, and pleasure, and many more they may afterwards read for themselves; while the Greek and Latin languages contain but few works suitable to Christian women of the 19th century. Besides, the majority of those who have studied the classical languages as a means of training, seldom have a desire or opportunities to employ those languages in after-life, while German will be always serviceable as a spoken language.

I have already alluded to the reputed difficulties of the German language, and I have candidly acknowledged that there are many German works, especially in prose, which from the carelessness or design of their writers are really obscure. But I also ventured to assert, and I now repeat the assertion, that, although it may take a little more time to understand even a simple writer in German than in French, a lady may learn to express herself correctly, in speaking or writing on common topics, much sooner in the one than in the other. One reason is, that the French verbs are much more complicated than the German, and that the former language has many more idioms or set phrases than

the latter, in which you need in general to express yourselves only logically and grammatically to be well understood, while in the other language you are met at every turn with the terrific sentence: "That is not French!"

There is also this to be observed, that while in most instances a young lady has begun French in the nursery with a Bonne, and has continued speaking and studying it day by day, under masters and governesses, for eight or ten years; she generally attempts to learn German at a later period, when the mind is less flexible and the attention more divided, at the rate of one lesson a-week. Then she is discontented with herself, her books, and her teacher. if at the end of a twelvemonth she cannot read "Faust" (by-the-bye not a book for young ladies) without a dictionary, and keep up a German conversation and correspondence. The thing is expected to be done by magic; and if those magical means are not found in the common way, either the study is thrown up in despair, or recourse is had to quackbooks and quack-instructors who hold out the promise to teach the language in a given time; and the result is fresh disappointment.

The fact is, the German language, like every other, consists of many thousand words and phrases, and these can only be received and fixed in the mind consecutively, by steady efforts and through all the avenues by which the intellectual faculties can be affected—reading, writing, translation, and speaking. Some acquire more quickly and retain more firmly than others; there is, no doubt, also much in the method by which any knowledge may be presented to the mind, rendering its acquisition more or less difficult. Yet, whatever the capacities or the method, time and attention on the part of the students are required for all; and it is evidently unfair to demand from the German, what is not expected from other languages.

There has also sprung up of late a fancy, that languages are best learnt without a grammar. Now I grant, you may acquire a language without perusing a grammar-book. Yet unless you obtain a practical knowledge (whether you be conscious of it or not) of the power of auxiliary words, inflections, government, and position, by which in that language notional words are formed into thoughts, you will neither understand, nor be understood.

Suppose I were to tell you this moment: hold—paper—hand—each of these words would awaken a certain notion in your minds of one action and two things, which are represented through these sounds. Nay, you would even be doubtful whether by the word hold, I meant to signify an action or a thing. But as soon as I combine these words, and say: "I hold these papers in my hand," I have communicated a fact, a thought which no one conversant with the language can misunderstand. If,

then, such knowledge is indispensable, it is evident that you are a great gainer, if, instead of its being left to you to acquire it through your own inductions—which is necessarily a work of much time and labour, and must be attended by many failures before its completion—the facts are placed before you in their natural order and connexion, and with constant reference to your own language. If a child. as it has been said with much plausibility, learns the language of those among whom it lives without such helps: it does so at a period when the mind is eager to find terms for the numerous conceptions that daily crowd in upon it, when it is peculiarly pliant, prone to imitate and more retentive than at a later period of life. Besides, if you analyse the vocabulary and phraseology of children of six or seven years of age, you will generally find them very limited; and you must bear in mind that their knowledge, great or small, has been acquired by a daily intercourse and practice of many hours from their earliest infancy. If any of you can command similar advantages and can wait as long as the child, I grant you that you may possibly succeed But as our own children here, as well as as well. those of the educated classes of all civilised nations. have to learn the grammar of their own language at some period of their lives; I cannot see a good reason, why an adult attempting to learn a foreign language should not endeavour to acquire, together

with its vocabulary, the rules by which the words are combined into intelligible phrases.

But then, it will be asked, who can remember all these tiresome rules? To which I answer the more readily, that you need not do so, as I never expect my pupils to learn them. The plan I intend to pursue here, and which I always follow, is to let the pupils carefully and attentively go through the rules, write exercises on each, and by committing such exercises to memory when corrected, and by constantly referring to the same rules while reading, so to fix them in the memory through practice, that the students shall, in making analogous phrases, form them correctly, according to the practice of the best speakers and writers, from mere habit, and without at the time being conscious that they are following any rules whatever. Yet if persons should ever find fault with any thing they say or write, or they themselves entertain any doubt of the correctness of any expression they may wish to use, they will find a reference to their grammar easy, and will be glad to have some umpire on which they may depend somewhat more safely, than on a vague recollection of what they may think to be the general practice. Even if I could personally approve of such a loose system, it would be peculiarly out of place in an institution in which we especially profess to discard quackery, and teach all on fixed principles. Indeed, if any other course had been contemplated, you

would not see me now before you, as I have always refused to countenance these empirical methods, convinced that, independently of the mischief they do to the minds of the young, they never succeed in imparting a sound knowledge. Yet I shall bring in translations from German into English and from English into German, after the very first lesson, and shall require my pupils to read much; since a correct phraseology can only be obtained by the language we are studying being copiously brought before our eyes, if not before our ears; the grammar being only the regulator of the knowledge we thus acquire. And I would entreat all those who are about studying this language, to be extremely careful that every sound, every word, every sentence, they gradually bring before their minds, be correctly uttered and correctly received; for all their success will depend on the first impressions they obtain. These become as it were moulds in the brain, in which all they may wish to say or write in future must be cast; and in proportion as these moulds are true, so will be the castings that come out of them. so obstinate is the mind in retaining first impressions, that if these have been faulty, scarcely any afterlabour can correct them; as you may frequently find to be the case with English people who have been carelessly brought up.

I propose to spare you at the outset the trouble of finding the meaning of words in a dictionary, by

[Q. C. LEC.]

reading with you a book with interlineary translations. The time you will thus gain, I advise you to employ in the careful attention to every individual word and its component parts, so that you may recognise it again, and every derivation from it, in any other place. If the word reminds you of an English one, be the more attentive in noticing whether it means exactly the same thing or not: since these similarities, hastily taken up, often lead to the most serious misconceptions, if not to ridiculous blunders. But mind, at the same time, that you take up the words in the order employed in the English language, or construe your sentence, as it is called. For, unless you can do so, many sentences will be unintelligible to you, in spite of the translation. And if in future you wish to read German for yourselves, the best lexicons will prove valueless to you, unless you read thus intelligently, and thus observe, as you proceed, the relation of the words to each other. Do not neglect, either, to read the notes at the bottom of the page, and the rules of the grammar, to which you will be constantly referred, before you proceed to another sentence. there are, however, often several references to the same rule in one page, that rule, once thoroughly understood, far from requiring to be looked for every time, will only be the better apprehended by these frequent references, as being so many examples for its illustration.

At a later period, I shall require you to read, by a previous preparation, English into German, from the third section of my "Reader," which has been expressly arranged for this exercise. And by questioning the student on the subject so read, in German, and receiving the answers in the same language, a commencement is made for conversation, which may be indefinitely extended.

While speaking, however, on this occasion only of beginners and to beginners, I by no means wish or expect that only such will attend our classes here. At all events, I anticipate that those who commence with us will continue long enough to enter upon the literature of the language.

I may therefore state that I shall be most happy if at any period a number of ladies, desirous of a higher instruction, should wish to form a class—to read with them any work they may select, to explain its objects and bearing, and to enter, as far as may be practicable, into that branch of literature to which the work may belong. I would, however, advise all ladies, before they commit themselves to such a course, to make themselves thoroughly familiar with the language, and to learn to construe all such works with facility as they would readily read in English. This, indeed, should be the great end of every student of the German language, and will be the principal object I shall have in view in my teaching. Not every lady may have the desire,

the nerve, or the opportunity, to speak it; but all may learn to read it, and should endeavour to attain at least this advantage from their study. Many, indeed, fancy that they understand, when from the recognition of a few words here and there, they hammer out some meaning, which often never entered into the author's mind, and of which a fair construing according to the rules of grammar would instantly show the fallacy. Many translations of German works have thus been published; and as long as the English was readable, have been pronounced good versions. Others have been done with more care; but in consequence of the translators' ignorance of the subject of the work, or of their fear of making the author say what he did not intend to say, they have rendered him word for word, and so rendered him perfectly unintelligible, and consequently his labours useless to the merely English reader'.

I hope now to have fulfilled what I promised in the outset, that I have given you some notion of the character of the language which I shall have the honour to teach in this institution; I have called your attention to the literary treasures contained in

¹ A late friend of mine assured me that he was so perplexed in an attempt at reading a philosophical work translated from the German, that, although he then possessed but little knowledge of German, he had recourse to the original in order to understand the translator.

it, as well as to some other advantages which a knowledge and even the mere study of it would offer; and have finally explained how I intend to proceed in my teaching, and what I expect the pupils will do, in order to render my instruction as beneficial to them as it ought to be. And, in conclusion, I beg to thank you, Ladies and Gentlemen, for the attention with which you have listened to this feeble exposition, which to many of you could offer nothing new, or interesting; and to express a sincere hope that this institution will effect all the good its founders had in view in establishing it, and may prove a real blessing to this metropolis.

ON LATIN.

BY THE

REV. S. CLARK, M.A., vice-principal of st mark's college, chelsea.

THE study of the Latin and Greek languages, as I if by common consent of the nations of modern Europe, forms no regular part of Female Education. The name of Madame Dacier stands at least as solitary in Classical learning, as that of our distinguished contemporary, Mrs Somerville, in Mathematical and Physical science. They who have taken an humbler rank in the same field of labour, such as Elizabeth Carter, or who with some distinction have pursued the subject merely as an accomplishment-such as Queen Elizabeth and Lady Jane Grey-would altogether make up but a very small number. It is indeed probable, that three centuries ago, there was a greater proportion of English ladies who were classical scholars than there is at present. But from that time till the present, the knowledge of Latin and Greek in a lady has been in some sort a matter to be wondered at, and either to be made

much of and flattered, or else to be kept in the back ground and apologized for. It is in the former vein that Sir Henry Saville felicitated himself in his oration before Queen Elizabeth, that it had been his fate to hear Aristotle rendered clear, and the divine Plato made to appear more divine by the remarks and expositions that had been uttered by her majesty in conversation. This, not less than the opposite view, with which we come in contact more frequently, serves to prove and illustrate the prevalent notion that she who studies Latin and Greek goes out of the strictly feminine path of intellectual cultivation. The fact is one which deserves grave consideration. It is hardly likely that a notion that has endured so long and spread so widely, should be utterly without reason.

But I must leave it to those whose part it is to take a larger view of the subject of Education, to discuss the grounds and propriety of the common impression respecting the cultivation, by ladies, of classical studies, using the expression in its comprehensive sense. The subject brought under our notice by the proposed course of instruction in this institution includes only the study of the Latin language: and to that my remarks will therefore be restricted.

I know not that I can do better than avail myself of the opportunity which is now afforded me, to notice the chief advantages that may be derived from such a limited study of Latin as most ladies may aspire to, with a moderate sacrifice of time; to set forth what appears to be the due relation which the study should bear to other studies, and the mode in which it should be pursued.

The advantages which are most commonly alleged as inducements to the study of Latin are probably the most trifling of all. They are founded upon the notion that the prime object to be pursued is the power of translating Latin into English, in order that we may master the quotations and allusions to be met with in modern literature, and get some acquaintance with the Roman authors. Now I am inclined to think that these objects are by no means, in themselves, worth one tenth of the labour of learning a language, when we compare them with what might be done in other branches of knowledge in the same time. In modern books, not decidedly of a learned cast, one rarely meets with many untranslated quotations, that are really important to the tissue of the sense: and if one wants a superficial view of Latin literature, it may be got more easily and much more expeditiously and completely, through translations, than by imperfectly construing parts of a few authors from the original Latin. would not be supposed here to recommend recourse to versions where access can fairly be had to writers in their own words. But I speak of the mere acquirement of that sort of knowledge which is supposed to be sufficient for understanding the classical allusions which occur to one in modern publications, in conversation, and in our standard literature.

What I conceive to be the more solid benefits belonging to the study of Latin, to that moderate degree of proficiency which is within the reach of most educated persons, are—first, the direct help which it affords to the more perfect knowledge of our own tongue and of the modern languages most commonly learned, entering, as it does, into their substance as an element: secondly, the indirect help which it renders towards the same end, from the peculiar—perhaps unique—aptitude which it possesses as an instrument in teaching the science of language: and lastly, its advantage as an intellectual exercise.

In connexion with the first of these benefits, I trust I shall not be tedious if I glance at the classification and mutual relations of the chief modern languages of Western Europe, and especially at the points of contact between the history of Latin and that of our vernacular tongue.

Of the 220 millions who inhabit Europe, about 20 millions speak either Turkish or certain uncultivated tongues, not having any or scarcely any proper written literature, such as the Welch, Erse, Briton, and Finnish. The remaining 200 millions all speak cultivated languages belonging to the great Iapetic or Indo-European tribe; but they are divided with

remarkable equality into three very distinct and well-defined stocks. With one of these—the Slavonian, the chief branch of which is the Russian,—we have nothing to do. It stands quite out of our way. Of the two others, one (the Romance, Romanic, or South European) owes all its branches to the breaking up of the classical languages: while the other, the Gothic, includes the Norse languages, the German, with the Dutch and English. The great distinction of our own tongue is, that while it remains essentially Gothic in its basis, it has taken in a very large element from the Romance stock, which is of Latin origin.

The resemblance which languages of the same tribe bear to each other, and which distinguishes them from those of other tribes, consists in a general way in an identity of radical words, and of words expressing common objects. The ordinary relations of life, such as Father, Mother, Sister, are convenient examples, and the names of numbers, one, two, three, and so on, together with the personal pronouns. Making allowance for different spelling and slight changes in pronunciation, these words are substantially identical in all the languages of the Indo-European tribe, from the Sanscrit in the distant East, to the Spanish and English in the West. The leading resemblance, then, in tongues of the same tribe, may be said to be in words, and especially in particular classes of names.

But in languages of the same stock there is a further resemblance. They are kindred in their grammatical structure. This is, for the most part, a proof of closer affinity than a resemblance of particular words. For example, if an Englishman wishes to say, I should speak, or I will speak, he uses the word expressing the action in a simple form, along with an auxiliary verb, in which alone there is conveyed any notion of time or condition. A German does the same. But a Frenchman or an Italian would include the notion of time along with the action in a single word. Now these instances, as far as they go, tend to shew that the German and English belong to one stock, i.e., the Gothic; and the French and Italian to another, that is, the Romance, deriving (as has been stated) its existence and character from the Latin.

If it be admitted that the first and best qualification for understanding a word or phrase, and for using it with power and propriety, is an analytical acquaintance with its origin and elements, there cannot be much doubt, that a knowledge of Latin must be of great use towards the study of the Romance languages, seeing that they are immediately descended from it. They may be strictly said to find their common root in the Latin tongue, and to derive from it not only their words but those particulars in their construction in which they mainly differ from the English, and which, in consequence,

chiefly need elucidation to English learners. It is plain, then, that a knowledge of Latin must furnish the only satisfactory ground on which we can compare them with our own language, and with each other, and see their mutual relation in a useful and interesting light. This advantage of itself seems enough to recommend the study to all who would gain a sound knowledge of French, Italian, Spanish, or Portuguese.

But I would now look at Latin in its relation to English; a good knowledge of which is of infinitely greater value than all we can learn, without possessing such a knowledge, of all the languages in the world.

There is something to our purpose, in the way of analogical illustration, in the first formation of the Latin tongue itself, as it has been made out from legendary history and internal evidence. It seems that the language (in common, it must be said, with most other cultivated languages) owes its origin to the union of a conquered and conquering people, just as ours does to the mixture of the tongues spoken by the Saxons and Normans. In the language of the peaceful Pelasgi, who in very remote times inhabited the shores and flat cultivable spots of Italy and Greece, we have that large element of grammatical structure, and that vast number of words which are common to the Greek and Latin languages. In the same way, the modern German and English find a common ground in the old

Gothic. But a nation of warriors, the Oscans, dwelling in the mountains of Central Italy, came down, overcame the Pelasgi, and settled amongst them, as the Normans did among the Saxons. If we follow the well-known opinion of Niebuhr, a monument of this event exists in the fact that the Latin names of things connected with agriculture and domestic life, are the same as in Greek; in other words, they belong to the Pelasgic element' common to the two languages; while the names of weapons, and words connected with war are chiefly Oscan and utterly unlike the equivalent Greek names. Of the former we have examples in domus, ager. vinum, vicus, oleum, lac, bos, sus, ovis, malum (an apple), equus; of the latter in castra, hasta, gladius, arma, ensis, lorica, sagitta. The similar instance of our Norman names for meat, and our Saxon names for cattle, will occur to every one.

We find that the history of the real connexion between English and Latin carries us back to the time of Julius Cæsar. A Latin element then began to get a footing in our island, which remarkably survived the change in the main language that took place five centuries afterwards, and which still continues to exist. The old Celts had dwelt in woods and natural fastnesses, and gave names, by which we, after a lapse of 2000 years, still call our mountains, such as Helvellyn, Skiddaw, and Scawfell; our old forests, such as Dean and Arden; and most of our

rivers, as Avon, Yar, Derwent. In a similar manner the mountain ranges and rivers of America, the Alleghanies, the Ohio, the Mississipi, the Missouri, the Arkansas, retain their euphonious Indian names amidst the English spoken in the United States. But the Romans coming to Britain introduced a new social order, and a more artificial mode of life, and new names, which, along with what they stood for, were to become permanent in the land, were required. They built fortifications called castra or castella; they paved roads, called stratæ, or stratæ viæ, and planted Colonies or Colonies, as they pushed on their domination. From this earliest importation of the Latin, taken up and slightly altered by the Saxons, we have the common elements of the names of towns, such as Chester, Cester, Caster, Coln, and some others with a few common words, such as street and castle.

These words were of a military character. But after the Romans had left and the Saxons had driven the Celts into the corners of the Island, the Italian missionaries, who converted the Saxons, brought over a stock of ecclesiastical words, which were appropriated by the language; such as Minster (from Monasterium), Monk, Bishop, Saint, Chalice, Paten, Candle, Psalm, and many others. In connexion with this, it may be worthy of remark, that the word Church or Kirk, which is generally regarded as Greek, and is certainly not Latin, seems to have survived from the old British Church, and is con-

sidered to point to the East as the quarter in which we are to look for our mother-Church. It is remarkable, that the word *Church*, or *Lord's house*, is common to all the Slavonic and Gothic languages: while the word *Ecclesia* or *Congregation*, quite distinct in its etymology and meaning, denotes the same thing in all the Romance languages, which would appear to have derived it from the Roman Church direct.

But the two classes of words which I have mentioned are very unimportant in significance and number compared with the third importation. Anglo-Saxon tongue had attained its perfection in the reign of Alfred, and if it was somewhat corrupted by the Danish invasions, it remained altogether Gothic, both in words and structure, till the time of Edward the Confessor. The great influx of words of Latin origin that was destined to change the character of the national language then commenced. The king's own taste, and his foreign courtiers, substituted Norman French for Saxon in the court, and turned the latter into contempt and ridicule. We are told that the more ambitious English nobles used to stammer the new tongue even in their own houses and to their own families. Of course this influence operated still more vigorously after the landing of William, and the Saxons were driven into holes and corners. It was not till the time of John that the English had a monarch who could speak

their tongue; and long after his time, the stream of French words continued to flow into the language through the Romance literature, which was probably as much read here as in France. Still the Saxon language, like the people, subsisted and sturdily bore up under contempt and oppression; and when, between the reigns of Henry III. and Edward III. the language which may properly be called English came into form, the old Gothic foundation and structure remained unshaken, and the new words, though very numerous, served mainly to enrich and enliven it.

It was thus that the great Latin element came into our language. But as its previous course was somewhat indirect, it may be worth while to trace it a little more closely.

When the tribes of the North came down and took possession of the provinces of the Roman Empire, they retained for a time their Gothic dialects, while the conquered people, designated by the common name, Romans, retained the Latin language, which now acquired the name *Vulgaris*, or, the common tongue. In process of time, however, the conquerors in the South and in France adopted the language of the conquered, not perhaps in its purity, but in each case (according to an opinion which seems probable) absorbing more or less of the Gothic dialect with which it had come into contact. Some changes of structure took place, and

some manifest defects in the pure Latin were supplied: for instance, the absence of the article was made up by a barbarous but convenient application to the same use of one of the demonstrative pronouns. In this way, towards the end of the sixth century, the Roman or Romance languages arose out of the ruins of the pure Latin.

The first of these which assumed a cultivated form, and emerged from the rude awkwardness of the transition state, was the Provençal, spoken over the south of France, the north of Spain, and the north of Italy. This was about the tenth century, and between that and the thirteenth lived the famous Troubadours, whose Provençal lays have been so famed, and whose genius has transferred the name of the language in which they wrote to that kind of composition, which is now termed a Romance in all the languages of Western Europe. At the end of this period the language perished almost entirely in France, when the Provençaux were so severely punished by S. Louis for their treatment of his brother Charles of Anjou. Nearly at the same time in Italy the language, in spite of its poetical riches and undoubted beauty, gave way before the modern Italian, which, glorified by the genius of Danté, seemed to spring forth at once in ripe perfection.

During the time of the Troubadours, another Romance dialect was coming to perfection north of

the River Loire, which at last supplanted the Provençal all over France. The two languages are often known as the langue d'oc, and the langue d'oil: because south of the Loire, that is, in the old province of Languedoc, the affirmative particle was oc, while north of the Loire it was oil, now changed into oui. The Poets who wrote in the Langue d'oil were called Trouvères. By a natural progression this tongue has passed into the modern French. when in the tenth century the Norsemen had settled in the part of France called Neustria, and given to their territory the name of Normandy, they adopted it nearly as it was then spoken, but mixed with it something of the Norse. Thus arose the Norman-French, the vehicle, as we have seen, through which. by far the largest proportion of the Latin contained in our present language was introduced.

It follows from what I have sketched, that we have several distinct classes of words bearing a traceable relation to the Latin.

I. Words belonging to the original Saxon, which stand in a cognate, and not a derived relation to Latin words. A little practice and thought will easily teach the student of English to distinguish these from words directly or indirectly derived. When two words are cognate, we must of course refer both to some common origin: and it is in this line of observation that European philologers have of late years made so much use of the Sanscrit.

containing as it often does the links which connect together words in different languages, which had else seemed entirely separate in their elements. As examples of cognate words, I may just mention the Latin prepositions in, ad, pro, compared with the Saxon and English in, at, for—sit, know, yoke, compared with sedeo, nosco, jugum. These coincidences carry us to the bond of connexion between the languages of the Indo-European family, to most of which the words I have named, with many more, are common.

- II. The second class consists of words derived immediately from the Latin. I have already mentioned some names of places, military terms, and ecclesiastical words. To them may be added some modern words used in the arts and sciences. However, the number of this class is but trifling.
- III. The third class comprises the words that have come to us through the Norman-French, which are said to amount to forty-nine fiftieths of the Latin portion of our language.
- But, I fear, that in attempting to trace the introduction of the classical element into the English language, I may have been betrayed into a superficial digression, jejune and useless to those who have studied the subject, and dry and tedious to those who have not—It has been my desire to show how it is that the study of Latin, as a branch of female education, may have a direct practical bearing

upon the study of modern languages: and this I have been tempted to think is not to be done without keeping in view the historical relation of those languages to each other, and to that venerable Latin once spoken by the masters of the world, and for ages afterwards employed as the one language of religion, literature, and science.

If we were not to care for this historical developement, and our object were only to be able to tell what Latin words English words are derived from, the method pursued in some Scotch schools of teaching insulated Latin words might answer our purpose. This practice may seem to be specious, particularly for ladies. But it is (if I am not mistaken) nearly worthless. If we are to have anything to do with Latin, it should be learned as a language, not as a mere bundle of words, or rather of sounds. For no one can in a proper sense learn a word from a mere vocabulary, or as it stands detached. the best, such learning is like looking at a dried plant in a hortus siccus. To know a word really you must witness its power in combined expression; you must use it yourself. A word is not like a brick, dead and lifeless, to be cemented on to what is placed before it, and what after. It has in itself a living principle, and a power of its own to do good or harm. The prime object of one of the worthiest books of our time, or of any time, is set forth by its author in words, which,

though familiar to many, can never be quoted more often than they deserve. - "My object (says the writer) is to direct the reader's attention to the value and science of words, their use and abuse, and the incalculable advantages attached to the habit of using them appropriately, and with a distinct knowledge of their primary, derivative, and metaphorical senses. I would neglect no opportunity of enforcing the maxim, that to expose a sophism, and to detect the equivocal meaning of a word is, in a great majority of cases, one and the same thing. Horne Tooke has named his celebrated work, 'Winged Words, or language, not only as the vehicle of thought but the wheels. Now I would substitute for 'winged words,' 'living words.' The wheels of the intellect I admit them to be: but such as Ezekiel beheld in the visions of God as he sat among the captives by the river Chebar, 'Whithersoever the Spirit was to go, the wheels went, and thither was their spirit to go: for the spirit of the living creature was in the wheels also "."

Since the very first means of seeing into the power of a word is to look at the elements out of which it has been formed, an equally important particular towards the development of that power is ever to keep the meaning which it derives from its origin in view while you are using it; even when you are employing it in some secondary sense. It may be

^{*} Coleridge's Aids to Reflection, Preface.

clearly seen by any competent person, that the habit of thus always looking through the words they used, was a great characteristic of the best writers of the best age of our literature. It cannot but strike any thoughtful reader of our greatest divines, of lord Bacon, of Milton. Though Shakspere himself might, as Johnson said, have had little Latin, and less Greek, in the sense in which a knowledge of those tongues is spoken of in the schools, it is by no means hard to see that he never used words without exercising precisely that insight into their power which results from the practice I have mentioned.

There can be no just reason why women should not enjoy this advantage as freely as men; and therefore as a help to enter properly into the spirit of the best part of our literature, and to write and speak your own language with significance and propriety as regards the power and meaning of particular words, there is, I conceive, ground enough strongly to recommend the study of Latin, if there were nothing else to urge. It may be true that only about one-tenth of the 60,000 words which our language is considered to comprise are of Latin origin: but those words are in themselves of great moment and frequent recurrence, and in their roots they are, as we have seen, what connect our tongue with French, Italian, Spanish, and Portuguese. As regards mere English Etymology, it might be said that Anglo-Saxon, since it supplies not less than four-fifths of our words, would seem

to be still better worth learning. But this remark is, I think, capable of a very decided answer. The words we have from the Latin are generally considerably altered in form, variously compounded, and, above all, changed in their common applications by metaphor. The Anglo-Saxon words we use, on the contrary, mostly retain their primitive meaning, and are, for the most part, kept simple and essentially unaltered. The root and substance of our language is, in short, Saxon: and the Saxon words carry their meaning to our minds at a glance, as they did to our Anglo-Saxon predecessors of old. This fact-one rather to be felt for one's self, than formally provedis what in a great degree gives a kind of superiority to Saxon words, over words of Latin derivation, whenever they are fully competent to convey the meaning of the writer or speaker. They come home to our minds as if they belonged to us, and tend to give simplicity and force to the style in which they abound. This remark as to our older writers, is trite enough. But it has been well observed, that the admirers of lord Byron's poetry are seldom aware that the element of real force in his style, that to which it owed a great part of the popularity it once had, consists in its strong Saxon character. The proportion of Latin words in his writings is remarkably small: smaller (it is said) than that contained in any other writer since Swift.

But although it is undoubtedly a good and whole-

some rule to prefer a Saxon word to one of Latin origin, when the one is precisely equivalent to the other, we cannot in any full expression of thought dispense with a great use of the Latin element. We need a caution against employing it too freely, not because we have too much Latin in our language, but because the perverse taste of an age that is now passing away, affected its use too much. We shall only know when to use our Latin words and when not, by understanding them. We shall be in great danger of not understanding them, if we are not furnished with that key to their meaning which is only supplied by a knowledge of the Latin language.

Before I proceed to notice the less direct benefits resulting from the study we are considering I will make some remarks on the mode in which I conceive it should be pursued by ladies. To those of you who may be led to it by individual taste, there can be no reasonable objection to your proceeding in the ordinary track, and reading the common authors in the common way of those who are to become classical scholars. But to those who would make Latin a regular part of female education, and still not disregard the distinction which has acquired such old and widely-spread sanction, I would submit a different course. It might be taught more as a living language; less with a view to reading classical authors, than to acquiring a ready command of the common words and common phrases of the language. To those who

could advance to considerable proficiency, Latin composition might be a prior object to an acquaint-ance with Roman literature. Familiarity with what is common would be rather pursued than a knowledge of what is rare and difficult. For this end it is plain, that turning English into Latin, and a constant practice in Etymology, should be leading means. And to this should be added a habit of bringing forward parallel words and phrases from modern languages, according to the acquirements of the pupil in that line. The very first elements in a course thus conducted, might (I conceive) be made the means of conveying most valuable collateral instruction, and the permanent benefit to be acquired from it would begin with the very beginning.

Of those advantages which indirectly result from the study of Latin, some, I may venture to say, are, to ladies especially, the most important of all. They depend mainly on the peculiar character of the Latin tongue, and some of them upon those very qualities which render it perhaps the most defective of all highly-cultivated languages for expressing thought and feeling.

The panegyrists of Latin praise it without fear of contradiction for its conciseness, its formal regularity of structure, and a certain kind of hard sinewy strength. It is adapted better than almost any language for some kinds of historical narrative, for indignant declamation, and the more stern kind of

satire. But to set against this it has a dry mechanical refractory stiffness, and a singular want of words and modes by which to express adequately and accurately high and inward thoughts and feelings. Those writers who did best with it in philosophical subjects, and in dramatic composition, were trained to do what they did by a close copy of Greek models, and acknowledged how straitened they found themselves in their pure native tongue. The language may indeed be spoken of as a kind of skeleton or machine, well compacted as such, but wanting muscle and life. This may be seen in a strong light when it is compared with Greek or English.

As, however, the study of a skeleton is necessary to give an elementary notion of the human frame to the young Anatomist, so Latin seems better adapted to teach us the elements of grammar than any other tongue. We see in it, as it were, the bare bones of expression. And, moreover, as it is very different from the English, far more so than any modern tongue, the contrast is very instructive. It may be doubted whether a sound knowledge of grammar can be got without the comparison of at least two languages; and the advantage which this comparison affords is more full in proportion as the languages differ from each other (so that it be within certain limits) in structure and general character. Latin is remarkable in this regard, from its having supplied so much of the material of the English tongue, and yet being so unlike it in general features. Its unlikeness would be more obvious to many, if English grammar were generally treated in a manner more according with the genius of language than that adopted in our common school-grammars.

But the advantages which I have hitherto mentioned are all, more or less, founded on a regard to expediency, to obvious usefulness. There is another view to which I would call your attention. I allude to the value of Latin as a mental discipline. I trust I shall not incur offence if I say that female education is fearfully crippled, (even when compared with the far too low standard of the education of men) by a close adherence to low expediency. The learning of that which will make no show, which will not add another accomplishment, is sadly disregarded, or even contemned. The surface is attentively considered and trained and adorned; but that which leavens the mind through all its pores, and works within, unseen except in its remote fruits, is ignored and neglected-On this ground I would claim respect for the study of Latin. At the same time I will not deny that there may be other studies which, for this end, might serve as well. But I do not think there is any, at least among those so likely to be interesting and to have other recommendations, that would do better. The study of a dead language is not apt to degenerate, like that of a living one, into the acquiring of a mere conventional faculty of utterance: it must go somewhat deeper, and to those who would not

take it up as a means of pedantic display, the study is, on this account, out of the reach of a dangerous intellectual temptation. Along with this negative advantage, must be taken into account, its formal logical character, and its organic connexion with the languages that most of you have learned, deepening, connecting, and quickening the knowledge you may possess of them, in a manner and to a degree not to be set forth in words. All these points are so many especial qualifications for a study to discipline and invigorate the mind. The stricter grammatical elements of the language may fade in the memory: the habit of writing it, and even of translating it into English, may become dull and slow: but if the language has even been studied upon sound principles, and with earnest purpose, the effect will abide. You cannot but have acquired an enduring and precious possession. To sum up in brief the advantages which the study will surely bring-it will render you great help in speaking, writing, and understanding your own and other modern languages, it will enable you to enter more thoroughly into the spirit and meaning of what is best worth reading in English literature: most certainly of all, it will help you in thinking clearly: and, as an exercise of the mind which is to bear no mere outward fruit and which essentially tends to something beyond itself, it cannot fail to have a confirming and ennobling influence which will operate upon all your studies.

ON THE ORIGIN OF THE ITALIAN LANGUAGE.

BY

Dr. BEOLCHI.

T REMEMBER having read, when I was at school I in Italy, a pamphlet in which the author described the dreadful effects of an earthquake in the kingdom of Naples; and amidst the many scenes of destruction there portrayed, I was struck by this singular fact. An elevated ground of volcanic origin by the shock of that convulsion happening to be sundered, one half fell down, and the standing half exhibited this striking view. On the top a part of the burial-place of a neighbouring village; lower down part of a Roman cemetery: and at the bottom the remains of an Etruscan one. Here is a melancholy picture of the fate of nations! Of three great nations which at different times inhabited the soil of Italy, two have past away, and we meditate on their history over their tombs. Whether the Etruscans were a race of Aborigines, or whether they were a colony of Pelasgi or of Lydians, it cannot be denied that

they were a great people; and had any one been able to foresee, that to Italy was destined the empire of the world, seeing the rapid progress with which the Etruscans extended their dominion from one sea to the other, to them and not to the Latins, such a fortune he would have announced. The more fortunate Romans subdued the Etruscans, and of a people who struggled for five centuries for their independence and the dominion of Italy, all memory has perished, save what their proud conquerors were pleased to record, to magnify their own triumphs.

Yet we are told by the Latin historians, that the Romans were accustomed to have their children instructed in the Etruscan knowledge; a fact which sufficiently shows the intellectual superiority of the Etruscans over the Latins. And when we consider the beautiful monuments of that people, which have been spared by time, we must conclude that they were far advanced in the fine arts, and possessed a high degree of culture, a refined language and literature; for the fine arts can only reach that point of perfection which Etruscan monuments exhibit, amidst a people who have attained a high degree of civilization and culture.

But of their language the very alphabet has been forgotten; and the many Etruscan inscriptions which from time to time have been discovered, were to the understanding as if they had not been sculptured on those stones.

A happy discovery, the celebrated Gubbio's Tables found in the year 1444, came to throw light over that darkness. At first they were supposed to be written in the Egyptian language. One learned man pronounced those unknown characters to be old Greek or Cadmeian; another was of opinion that they were Carthaginian. An attentive inspection showed that they were Etruscan, and that the Tables contained the rites and religious ceremonies of that people. Two of these Tables were found containing the Latin translation of the Etruscan ones. Thus comparing word with word, letter with letter (Latin and Etruscan being kindred languages), human ingenuity succeeded in reading the Etruscan, and giving us an alphabet, a grammar, and a vocabulary of that language.

To those who would wish to have some know-ledge of that ancient and long-forgotten language I would recommend the work of Lanzi, "Saggio di Lingua Etrusca." And to those who would like to have a minute knowledge of the history of the Etruscans, as well as of other nations who inhabited Italy before the Romans, I would recommend the work of Micali, "L'Italia avanti il dominio dei Romani."

By the conquests of the Romans the language of the Latins was spread all over the peninsula, and from its humble origin, by degrees enriched and ennobled, it became at last the language of Terentius and Cicero, of Horace and Virgil.

Here a question arises. Did the Latin, by its diffusion over Italy, supersede and silence the Etruscan and the other languages spoken by the people of that country? This question shall be answered hereafter in speaking of the Italian. Conquest being the policy of the Romans, from the very foundation of their city they sought to increase their people by admitting into Rome strangers of every description. The consequence was that the Latin language soon began to be altered; so much so, that a treaty of peace, written in the third century from the foundation of Rome, between Rome and Carthage, could hardly be understood at the time of Polybius.

It happens with languages as with organic beings. Their internal vital principle is gradually altered by the action of the external opposite forces which combat and destroy it. The vital principle of a language is its peculiar character, consisting in the structure of its grammar, in its syntax, in the harmonious affinity of all its words, by which their sounds, although very different, harmonize together and exhibit a common feature which shows that they all belong to one single family. As long as that principle lives, the language flourishes, and the incorporation of external elements does not alter it, because they are few, and because they are modified and assimilated by its in-

ternal power. But if the action of external elements prevails over the inward power of transforming them, and that inward power can no longer transform and incorporate them, then the individuality of that language is by degrees altered and destroyed. Such has been the case with the Latin, which more particularly began to be altered and corrupted from the first century of our era, when the afflux of foreigners in Rome was greater and more frequent than before; and its decline went on in the same proportion with the decline of the Roman empire, and civilization.

At last the irruption of the barbarians into Italy struck the last blow at that beautiful language; and with the Latin language all traces of human culture and civilization were spent. Ages of darkness followed ages of darkness. The ignorance of the people was only equalled by their wretchedness. No schools, no instruction, no books! Those wonders of Grecian and Latin wisdom, elegance, and eloquence, all were buried under the ruins of towns, or destroyed in conflagrations.

This was the condition of Italy for many centuries. When suddenly on the banks of Arno arose a genius, who in a sublime poem, still unrivalled, exhibited to the astonished world a language, which for harmony and elegance, energy and richness, has nothing to envy in those of Greece and Rome. How are we to account for this wonder? Did Dante

[Q. C. LEC.]

create the Italian language? When was it formed? How has it reached such perfection?

Several men of learning have already written upon this subject. The first is Leonardo Bruni, from Arezzo. He asserts that the Italian is as old as the Latin, nay, that it is the Latin itself-that Latin which was spoken in Rome by common people. Two kinds of Latin, he says, were spoken in Rome: a noble and elegant one by men of education, which was also used by the writers; and another, vulgar and unpolished, spoken by the lower classes; and he endeavours to prove this assertion by quoting some words from Latin comedies, in which persons of the lowest class, speaking in their dialects, make use of Italian words, as, for instance, bocca instead of os, the mouth; testa instead of caput, the head. Now, he adds, when by the invasion of the barbarians every kind of culture had disappeared, the noble Latin perished, and the vulgar only remained amidst the uneducated people; which was maintained alive by the wants of daily intercourse. This vulgar Latin, called into action at the rising of letters in Italy, being adopted and polished by writers, became in course of time the beautiful Italian language. This opinion is followed by two other learned men, Bembo and Quadrio.

But although we are disposed to admit with the learned author, that a difference must have existed between the language spoken in Rome by the educated persons and that spoken by the common people, a difference which appears to exist at all times and in every country; still we cannot agree with him, that that difference was such as exists between Latin and Italian.

Nor does the author show us how to account for the difference of the two grammars, for the articles of the Italian, for the prepositions instead of Latin cases, the termination of all words in vowels, and for all the other discrepancies which are observed in the two languages. Nor are a few Italian words, found in ancient comedies, sufficient to establish the fact, that the Italian and the vulgar Latin are the same language.

Scipione Maffei, well known abroad as the author of that beautiful and affecting tragedy La Merope, but who is held in higher estimation in Italy for his learning, rejecting Bruni's opinion, put forth another, stating that the Italian is nothing else than the Latin, gradually altered and corrupted by the erroneous and vitiated pronunciation of the low people, and by the amalgamation of their vulgar words.

But how one language can be transformed into another merely by the defective pronunciation of the lower classes, and by the addition of some of their words, I confess it is difficult to understand. Moreover, against this opinion stand all the objections raised against that of Bruni.

Muratori, the most learned and most patient of Italian antiquaries, having undertaken the laborious task of examining all the writings from the fall of the Roman empire to the rising of letters in Italy. all the contracts, all the testaments, written in the wretched Latin of that time, thought he could trace the corruption of the language in its progress. first observed that new words, quite foreign to the Latin, were introduced into that language; that Latin terminations were altered: that articles were adopted; that prepositions were substituted for the Latin cases, and auxiliary verbs for the conjugations. "What other proof do we require," said he, "to establish the origin of the Italian language? The Italian language is the Latin altered and corrupted by the languages of the northern invaders."

Tiraboschi, in his History of the Italian literature, entertains the same opinion.

With all the deference due to men of such great learning, I beg to make a few remarks.

That the Latin was spoken by the inhabitants of Italy, Muratori gives it as a matter of fact. But, in my opinion, he has failed in proving that fact; for from his arguments it appears, that that wretched Latin was only used by the lawyers and the clergy. And I am induced to think that this was really the case, and that the Latin was not the language spoken by the people at large, from the following circumstance: Towards the end of the 12th century the patriarch

of Aquileia having preached a sermon in Latin, the bishop of Padova was obliged to explain it to the people in their own language. Now if that Latin was not the language of the people, how could it have become the Italian language? Besides, Muratori has not explained to us how from two languages, abounding in consonants as the Latin and German do, could have been derived a language so harmonious as the Italian. Nor do we find in the Italian language so many words of German origin, as to establish the fact, that the German has contributed to the formation of the Italian.

But if the arguments of the distinguished writers, which we have examined, are erroneous, what opinions can we form as to the origin of the Italian language?

Since the time that Dante, Petrarch, and Boccaccio, with their immortal works, have raised the Tuscan above all other languages spoken throughout the peninsula, and have made of it the literary language of Italy; since that time five centuries and a half have elapsed. And yet has the Tuscan done away with all the different dialects spoken in the several parts of Italy, namely, the Piedmontese, the Genovese, the Milanese, the Venetian, the Neapolitan, the Sicilian? No. Those dialects are spoken at present as they were when first the language of Tuscany became the language of Italy. And if the Tuscan, after five centuries and a half, with all the support of modern inventions, the press, the literary

papers, and the works of so many noble writers, has not succeeded in superseding those dialects, which are still the language of the common people, can we for a single moment suppose that the Latin could have superseded the Etruscan, the Umbrian, Sabellic, Oscan, and all the other languages which were spoken by the various inhabitants of Italy, before the dominion of the Romans? Analogy leads us to conclude that such has not been the case. To annihilate a language, it is necessary to annihilate the people who speak it. Now if the Etruscan was not superseded by the Latin during the dominion of the Romans, it must have survived their empire; it must have been the language spoken by the Tuscan people, whilst Latin-that wretched Latin of the middle ages-continued to be the language of the writers.

When at the beginning of the 11th century, by the spirit of liberty and independence, the Italians were roused and called to a new political and enterprising life—a life which was the dawn of the regeneration of all Europe—the Tuscan language must have been called into action in Tuscany, it must have been the language of its orators, its generals, its merchants; for one can hardly suppose that a people possessed of such an enterprising spirit could express their noble thoughts in a dead and long-forgotten language. But the Tuscan language, being still unpolished, could not have been used in writing. It waited for

a genius who should call forth all its powers. This genius was Dante.

Other poets before Dante had perceived the superiority of the Tuscan over all the other languages of Italy. Ciullo d'Alcamo in Sicily, Folcacchiero at Siena, Guido Guinicelli at Bologna, and several others before Dante, had chosen the Tuscan for their poetical compositions; but their authority and their example could not have sufficed to raise the Tuscan to the literary language of Italy, principally when a romantic language and a brilliant literature were captivating all minds—the language and literature of the Troubadours. A genius like Dante alone could fix the fate of the Tuscan language. He placed it in such a light, that the thought of adopting another for the literary language of Italy, could no longer enter the mind of succeeding writers. The good fortune of the Tuscan was to find three such writers as Dante, Petrarch, and Boccaccio, who rendered its superiority indisputable.

Now, if I have expressed myself clearly, you will have already understood my opinion on the subject. If I have succeeded in proving that Tuscany, the ancient Etruria, is the cradle of the Italian language; that the ancient Etruscan was not superseded by the Latin under the Romans, but that it survived their empire; we must come to the conclusion, that the origin of the Italian language is the Etruscan.

There may have been many alterations in the

orthography and meaning of the words, many new ones added, many fallen into disuse, many forgotten; in short, all those changes which time and the encroachments of foreign nations never fail to bring into a language; but I maintain that the principal foundation of the Italian is the language of ancient Etruria. And let not the resemblance of the Italian to the Latin lead you to another conclusion; because that resemblance is the very one which originally existed between the Latin and the Etruscan.

Sparing you the tediousness of quoting and comparing words from both languages, you may take it for granted, upon the best authority in Etruscan matters, the authority of Lanzi, that out of twenty Etruscan words found in the Gubbio's Tables, nineteen are explained from their similarity with the Latin.

Having now established the origin of the Italian language, allow me to say a few words upon its merits.

The elegance and richness of the Italian language are acknowledged by all. Nearly six centuries of existence, and a literature one of the richest and finest, have made of the Italian unquestionably a classic language. On account of its harmony it is the language of music throughout Europe; which harmony arises from the equal distribution of vowels and consonants in the composition of its words, and from being free from all harsh sounds, such as aspirations, guttural and nasal sounds. It was for a

long time the language of diplomacy, and it only ceased to be so with the decline of the political importance of Italy, under Charles V.

But should Italy, by a new political settlement in Europe, be restored to that rank which a people of twenty-five millions, with no small share of intellectual power, entitle her, the Italian could hardly fail to regain its place amongst the modern languages.

Dr Beolchi concluded this lecture by reading Manzoni's celebrated Ode, *Il Cinque Maggio*, on the death of Napoleon Bonaparte.

ON THE ENGLISH LANGUAGE AND GRAMMAR.

BY THE

REV. A. B. STRETTELL, M. A.

MERE glance at the Time-table of this College A will convince you of the importance which the Committee attach to the study of language. one am far from thinking that its importance can be overrated. Instruction is offered you in the three principal modern languages of Europe-the French. the German, and the Italian-in the language of ancient Rome, and in your mother-tongue. objects with which you will study these, will no doubt be different. Your more immediate object in learning the first three, will be to acquire the power of conversing with the natives of other European nations in their own tongue, or at all events of entering into the written thoughts of their principal authors, a source of pleasure and profit more constantly within your reach. Great indeed is the advantage of being brought into contact with minds

cast in a different national mould from our own, an advantage which, however, we can hardly enjoy without being able to converse with them in the language in which their thoughts are habitually clothed: great indeed is the privilege of entering into the possession of fresh materials of thought drawn from the treasures of wisdom and experience which other nations have amassed during the centuries of their existence. But the study of modern languages may afford you more than the means of communication and information; it will, I hope, lead you to perceive that, however many and great our national distinctions of character and language, there is still a bond between us, which the circumstances of place cannot destroy, and that in cultivating our several national advantages and gifts, and not in ignoring our differences, we shall most effectually realize our relation to one another as members of one great family. Again, if I rightly apprehend the object with which the study of the Latin language has been added to your course, it is intended not so much to give you an extensive acquaintance with the authors of ancient Rome, as to make you more thoroughly acquainted with the powers and structure of your own tongue; to teach you that the same logical principles, which determine, more plainly perhaps than of any other language, the construction of the Latin, are also the governing principles of your own. This may remind you too that

the study of a language is not merely the means of opening for you the stores of thought contained in that language, but is also a discipline for your own faculty of thought. But from this study also you may gather the wider lesson, that there is a bond between men as men, which the circumstances of time cannot destroy, and that through it you may be the inheritors of the wisdom which other ages have struggled for and won. After all, however, the knowledge of your mother-tongue must form the central object of your studies in this department; if, at least, you are not content to regard language merely as an instrument for bringing information within your reach, or as itself one of the principal instruments for training your minds; but, more than all this, as a divinely-appointed means for educating your own spirits, and enabling you to educate those of others. How and why language, especially your own language, is all this, I will try to explain to you, though I deeply feel the difficulty of the task. How should it not be difficult, when it touches upon some of the deepest mysteries of our being?

Speech is the gift of God to man, and to man alone of all the visible creation. It were well for us, if we would think of this when we are tempted to speak much or carelessly, without considering the objects for which this gift was bestowed. William von Humboldt has said, "man speaks because he thinks." If man were not "a being breathing thought-

ful breath," he would not be able to shape his breath into words. Speech is in fact the power of uttering thought, of giving an outward shape to thoughts, either in visible signs or audible sounds. But more than this: so closely are the two, reason and speech, joined together, that language is not only the utterance of thought, but the very condition of thought; thoughts can no more exist without words, than they can be expressed without words. I would fain dwell upon this a little, because it explains some curious facts of our being, and shows us besides both the importance of language and the right mode of studying it. If you have ever reflected at all upon your own thoughts, you must have remarked that even whilst they dwelt in your own minds, uncommunicated to others, they were clothed in words. It seems as if words were not merely necessary to make others acquainted with our thoughts, but to make ourselves acquainted with them; as if man as a compound being, an embodied spirit, required that his thoughts should have body as well as spirit, an outward sign as well as an inward meaning, in order that he might be conscious of them, and deal with them. In fact, we may dream without words, but we cannot really think without them. Let this be a warning to us to distrust our clear apprehension of a subject when we cannot express our meaning to others. On the other hand you must have remarked, that the necessity of expressing our convictions in words has

brought them out for ourselves into greater clearness. and led us on to farther discoveries. How often have thoughts which had long lain dim and confused in our minds started into life and order, when we have stirred ourselves up to talk of them to others! how often, in the very act of teaching others, have we taught ourselves! The very words which expressed one thought have, from their very indwelling power, their suggestiveness, their many-sided significance, given rise to other thoughts. We are often puzzled, again, to give the right name to an object or a feeling, because it has never itself been made clear to our minds; until some one more enlightened than ourselves gives us the right name, and with the right name a clearer view, a more distinct consciousness of the thing itself. This is just one of the works that great men and great poets are accomplishing in the world. They speak out what many minds are dreaming of, they express wants which many hearts are feeling. And it is just because these men have found the right words for their brethren's unconscious thoughts and yearnings, that so many answer as with one accord their call, so many awaken from their sleep and follow them. You must often yourselves, in reading the writings of some great man, have exclaimed, "How natural this is, how like what I have felt and have thought myself, but could not express!" And why? because it was not given to you, as to

him, to see with eye unveiled into the mysteries of of nature and of man.

Look, again, at the mind of a young child as an illustration of the fact that words and thoughts unfold themselves together; observe the way in which children learn their mother-tongue, how marvellously soon, with how much delight, with how little trouble, they gather their vocabulary. How different the task when they grow up of learning the words of a foreign language! And why is this? Because with children the knowledge of things before unknown accompanies their learning of words; because, having formed in their own minds the conception of an object, they long to name it, and therefore grasp eagerly, and store up carefully the word which enables them to identify it, and call up at will the impression which it created. You will not find it at all an easy or pleasant, nor, I may add, profitable, practice, (however common it may be), to teach children words to which they can attach no meaning. Thought and speech, knowledge and words, must proceed hand in hand.

The earliest history of the race of man confirms the lesson we have drawn from the earliest history of the individual. The fact to which I allude is recorded in the second chapter of the Book of Genesis, at the 18th and following verses. In order to understand its bearing upon the question of the nature of language, we must consider the passage as a whole. "And the Lord God said, It is not good

that the man should be alone; I will make him an help meet for him." The original idea of man is that of a social being, one intended to be raised above himself by loving objects other than himself. but like himself. Adam, however, as a reasonable creature endowed with judgment, was to judge what was an help meet for him; for it was, it appears, with this object, that "out of the ground the Lord God formed every beast of the field, and every fowl of the air; and brought them unto Adam to see what he would call them." There is much implied in the act of giving a name to anything; it implies not merely that a thing has been seen, has made an impression upon the senses, in the same way that an object casts its image upon a mirror, and vanishes; but that an image has been reflected in the mind, which is, so to speak, a living mirror, retaining the image which it has received, transferring it from the visible and outward world into its own inward and spiritual world. Thus Adam's naming of the creatures which were brought before him, was a proof that he had a certain knowledge of them, and claimed, as a spiritual being, a supremacy over them; we find therefore in the next verse that Adam so far knew the animals which he named, knew them in naming them, as to perceive their unsuitableness to form companions for him, not only their inferiority in degree, but their unlikeness in kind to himself. "And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field;

but for Adam," that is, emphatically, for a man, "there was not found an help meet for him." But when Eve was brought to him, he at once recognized in her a being like himself and answering to himself, and expressed this consciousness in the words, "This is now bone of my bone, and flesh of my flesh; she shall be called woman, because she was taken out of man." Isha, woman, from Ish, the Hebrew word for man.

Words are not then, we may conclude, arbitrary things, as some suppose, to be chosen or laid aside as we please or as we can, but living powers, expressive, in some measure, of the very nature of things themselves. Depend upon it, there is a reason why every word that we use is as it is. God Himself, who watches over and orders the affairs of men, who disposes of all the evil, and actuates all the good, that there is in the world, has not withheld His guidance, has not stayed His creative power in the formation of those words by means of which man communes with, rouses, instructs his fellow-man, learns to know himself and God's world around him. Surely they come from Him, who is Himself the Word, "by whom all things are made," from whom man derives all the light and knowledge he possesses. Take care then how you deal with words, they are sacred things, not lightly to be scattered abroad, not without the greatest danger to be perverted. They are not vain;

[Q. C. LEC.]

that is, empty things; they are spirit and they are life. Think, how they are not merely the utterance of thought, but the very store-houses of accumulated knowledge and experience. They enable us to identify the impressions we receive, to mark and fix the thoughts which arise in our minds. By words that which is fleeting becomes permanent, that which is given to one becomes the inheritance of all who are able to receive it. Meditate attentively on some of the words with which you are best acquainted, the names of relations, such as father, brother; of places, such as home; of emotions, such as love, envy, pity; even of merely outward objects, the sun, the moon, the stars-and say, do they not rise up before your mind's eye clothed with the manifold associations which have gathered around them in your lives? Do they not thus manifest themselves, not as things, for that they can never be, but as living powers, awakening further thoughts, supplying motives for action, stirring up human feelings, knitting together human hearts?

The reason why I have spoken so much of the connexion between reason and speech, knowledge and language, is, not because I suppose you will deny it, but because upon the distinct recognition of this fact depend our views not only of the best method of learning a language, but also of language itself as a moral and intellectual discipline. For if there be an indissoluble bond between thought and

language, our forms of expression must not be governed by any arbitrary laws, founded upon the authority of great writers and great wits, but by those laws which determine the way in which truth must be presented to the mind of man. Grammarians do not invent laws, they discover them; they do not impose rules, they recognize them. Now when I say that the laws of grammar are regulated by the laws of logic, I do not wish you to suppose that we are to lay down some system of logic, and determine to find in our language something corresponding to it. There are depths in language which our strings of formulæ cannot fathom, and relations which our understanding cannot define. Logic too is not itself a complete science. If in the study of language much is to be learnt from logic, we must also allow that in the study of logic much is to be learnt from language. They mutually explain and support each other. Men have felt this before now. Aristotle, who was the first to give a scientific account of the laws of thought, who was, so to speak, the father of logic, connected it most closely with grammar, and took the latter for his guide. That school, amongst the Greek philosophers, which devoted itself principally to grammar, the Stoic, was noted for its accuracy in carrying out the logical system. If since the time of Aristotle logic has made no certain advances, but has grown more and more stiff and lifeless, the reason of this

may well be, that since that time it has been divorced from language. Logic, however, has lost more than language by this divorce; for language, as a living organic whole, has grown and added to its stores, has gone on unconsciously under the influence of those very laws of thought, the application of which to its own case was little, if at all, understood, whilst logic as a science has stood still.

What I especially wish you to remember is this, that if language is the utterance of thought, and thoughts shape themselves in man's mind according to certain laws, they must come forth embodied in language bearing those laws more or less legibly stamped upon them. You may not hitherto have discerned this mark, because you may not be acquainted with the laws themselves. For in the same way that the majority of persons reason habitually and generally correctly without any acquaintance with logic, because their minds are unconsciously governed by its laws; so do the majority of well-educated persons write and speak correctly without any acquaintance with those fundamental laws according to which they speak and write. But then they do not know why one form of expression is right and another wrong, they can only appeal to custom and authority. The reason then why we wish you to become acquainted with the systematic grammar of your own language is not that we think you cannot learn by practice to write and

speak correctly without, except perhaps in a few difficult cases, but because an acquaintance with the essential laws of language will help you to *think* correctly and carefully, and this will in its turn enable you to express yourselves with greater force, freedom, and clearness.

But there is another deduction which I am anxious to make from the fact that thought and speech, knowledge and language, unfold themselves together. The very word I have just used, "unfold," may perhaps suggest to you what I mean. this, that as the mind of man and the knowledge of man have increased, not by successive additions from without, but by a gradual growth from within, under the manifold influences which the providence of God has brought to bear upon him from without,so likewise is it with man's language. Language is not like a building which is pieced together by man's art and device, and in which we can trace accurately all the successive additions: it is like a great tree which has grown from a small seed; it is, to apply a scriptural metaphor, "as if a man should cast seed into the ground, and should sleep and rise night and day, and the seed should spring and grow up he knoweth not how." The language of a nation bears upon its face the marks of the history of that nation, the traces of its education by God Himself. thoughts of many minds have added to its growth, the experience of life, the sights and sounds of God's

earth still form the soil and the atmosphere which it gradually assimilates to itself: it grows with man's intellectual growth, and strengthens with his strength. In their language the fathers hand down to their children the results of the wisdom and education of themselves and their forefathers: and the children receive this as their heir-loom, hold this as their vantage-ground from whence they may make fresh conquests in the fields of knowledge. Now such a view of language as this will make us look reverently at the facts of language; we shall not endeavour to twist them to suit our own theories. but shall look at them honestly and fairly; and, starting with the belief that because language is a spiritual thing, it is orderly in its development, we may, by collecting and comparing existing forms of speech, in the same way that the natural philosopher collects and compares the facts of chemistry, arrive at the discovery of those laws which determine the ' intelligible and faithful expression of thought.

In such researches, however, we must take logic for our guide; to use the words of Dr Latham, "History will teach us the way in which words and inflections have been used; logic the way in which they ought to be used. Logic is in language what it is in reasoning, a rule and a standard. But in its application to language and reasoning there is this difference—no amount of false argument can make a fallacy other than a fallacy; but lan-

guage, so long as it preserves the same amount of intelligibility, is always language." What then, we may ask, is the use of the logical standard? Not, I conceive, to enable us to restore a language which has long departed from it, to its original form: (other causes, over which the laws of logic have no control, may have influenced its historical development in this way, and forbid us to reduce forms of expression long consecrated by age to a stricter shape), but rather to help us to preserve the language of our forefathers from present licence; rather to help us to develope its powers, and make it to ourselves the most perfect possible organ of thought. If we regard language as merely a mode of communication between man and man, the end of it will certainly be answered if it is intelligible; but it does not even on this ground follow that a more logical mode of expression would not be more convincing to the hearer, more in harmony with the intellect of the speaker. Moreover, there is no doubt that many loose modes of speech have arisen, not merely from carelessness, but from want of honest earnestness; and the use of such may tend to encourage the habit of mind which gave rise to them. Loose habits of expression may perpetuate loose habits of thought; so that, as a safeguard against these, the comparison of our habitual language with the logical standard of language is desirable.

For these reasons then it is plain that the sys-

tematic study of language must be most beneficial as a mental discipline. But it is not only as an intellectual discipline that we cultivate this branch of science here, but for its moral value. This College is not merely a place of instruction; we desire it above all to be a place of education, that is, of training. But what do we wish to train? not the body, however desirable this may be; not merely the mind, though of course this is one great object, in order that you may in your several stations be qualified to bear your parts in the world, worthily, and usefully; but especially the spirit which is in you. Do not think it strange if I touch upon higher and holier subjects; for I want you to perceive that the study of language has a distinctly religious element: we all want you to feel that if your course here is to be one not merely of instruction but of education, there is not one of the subjects in which you are instructed which must not, more or less directly, bear upon religion. then that spirit which is in you all, and which Christ came to set free from the bondage of the desires of the flesh and of the mind, which we wish to train, by the study of language, amongst other means. How then, you will ask, does the study of language tend to this end? I answer, by withdrawing us from the contemplation of what we have distinctively to the consideration of what we possess in common. Differences of station, of age, of means, of talents, of personal advantages, of mental acquirements, these

distinguish us, and if we rely upon these, if we set the highest value upon these, if we pride ourselves upon these, if we use these for our own glory and profit without regard to others, we are shutting ourselves up within ourselves, excluding the air of freedom, riveting our own chains, enslaving our own spirits. But the more we esteem these distinguishing gifts as means of good to others, and cultivate them for the glory of God, the more we value that which unites us to others above that which distinguishes us from them, the more free are we, the more do we manifest ourselves as men and women, in the highest sense of the word, the more do we cultivate what is common to us all and the highest in us all, our human spirits. To awaken this deepest, truest, most important part of our being into life and activity is the highest end of all education. And the reverent study of language does this in an especial manner. For though there are other gifts which belong to us all as men, there is none more common than language, there is none so near to us, there is none which exhibits amidst its various forms so much unity, there is none which appeals to the man within us so closely. Professor Maurice has said, "The words which we speak and which we hear, those utterances by which we understand our fellow-men, and which enable them to understand us, surely there is a marvel and a mystery in these which must more assure the richest and the poorest, the oldest and the youngest, the most learned and the

most ignorant, that there is a bond between them, than all the common sights and sounds of nature, or whatever else in the world belongs not to one man but to For all these stand aloof from the man, but this belongs to him, this is the distinguishing mark of his humanity; it comes both from him and to him with the same witness of fellowship and sympathy." It unites him not merely with men of his own age and his own country, but enables him to enter into the mind, to commune with the spirits of those who live afar off, or who lived in former ages. I do not think that we can ponder these facts without perceiving that this study may indeed be made a most important instrument in education, that those words of Humboldt have in them a deep truth, "Man is man through speech alone." For it is through speech he is raised out of a state of isolation to a state of society; it is through speech alone he can share the thoughts and feelings of his brother man, and rise out of the sensual degradation of being one of a herd, to the moral dignity of being the member of a race. Now there is a word in this last sentence, which may lead us to another and not less important view of the study of language. We are members of a race, or of a body, not mere units in an arithmetical series. The word implies distinction; for are not the members of our bodies different, each having a different shape, a different office in the economy of our lives? And just because each of us has a different office to fill, a

different work to perform, differing according to our age, our talents, our country, and the period in which God has placed us—just because God has placed us here and now and thus in his Providence—I believe most firmly that we shall best learn to feel our position as members of a body, by doing that work, by cultivating those powers, by using those gifts, ever keeping in view the grand end of the whole, the glory of God in the completeness and well-being of his Church.

You then as Englishwomen have a work to do, gifts to cultivate, a language to study, a history to meditate on, a literature to read; and you will not answer the purposes for which you were ordained to live here, and at this particular time, unless you do this as far as lies in your power: you cannot cultivate your spirits in any other way so well as in the particular way thus set before you. You must realize your position as Englishwomen, before you can enter into the wider fellowship. Now with respect to language in particular. Your study of foreign languages may teach you, that however different they may be from your own in sound, in terminations, in arrangement, however few may be the words they have in common with your own, the essential principles, those which render communication possible between man and man, are exactly the same; that the same laws of thought we English men and women are obliged to follow if we would understand ourselves and make ourselves understood by others,

are equally binding upon the inhabitants of France, and Germany, and Italy. Here we see the indications of an universal bond between man and man. if we want to understand these laws, and to realize the manner in which they unite us nation to nation, we must study them in some particular language; and the more we enter into the spirit, and respect the genius of that language, the more distinctly shall we understand them. I have given one very sufficient reason above why the study of our own language demands our principal attention; but I will say further, that whether we regard the study of grammar as an intellectual or moral discipline, the study of our own mother-tongue must present the greatest advantages. Another language, such as the Latin, may furnish us with the clearest view of the formal arrangements and conditions of grammar, the best outward expression for many relations which we know must and have seen do exist in our mothertongue; such as the relations expressed by cases, prepositions, moods, conjunctions; but the facts and reasonings of general grammar are, after all, best learnt from our own. "We best learn the theory of a language when we study it independent of the practice. In the study of the grammar of an unknown tongue the attention is divided between the general principles of grammar common to all languages, and the special details of the particular language in question." We do not ask merely why is this so? but first inquire how is this to be? "Our settlement of the point of fact disturbs our settlement of the point of principle. In the former case the familiarity with the details leaves the attention undivided for the comprehension of general principles." And if, as I said before, the language in which we express our thoughts must bear the stamp of the laws according to which we conceive and arrange our thoughts, and habitual carefulness of expression is a most useful and practical mode of fostering clearness of thought, in what language can we so profitably study the laws which determine accuracy of expression, as that in which we actually think? We never think without words, and these words are generally, if not always, the words of our own tongue.

Equally strong are the moral grounds for choosing our mother-tongue for the systematic study of language. For it is in this language you will have to communicate with and learn from others on the deepest of subjects. When you are called to teach others, whether children, or pupils, or the poor of your neighbourhood, you will have to address them in English, to understand them in English, to enter into those English feelings which are best expressed by English words. Is not then the study of your own tongue likely to give you the most aid in finding the way to their hearts, to make you feel most sympathy with their ignorance, to furnish you

¹ Dr Latham's Preface to his English Grammar.

with the simplest clue to the meaning of their half thoughts, to enable you to find words to make their meaning clear to themselves? Your own earliest knowledge was acquired in this, in this were your deepest feelings expressed, in this were the prayers uttered you learnt at your mother's side; around the words of your native tongue have gathered all, or almost all, your own spiritual knowledge and experience; it is these words that the events of life have interpreted for you, it is these you know to be most full of deep and earnest meaning;—can you doubt then that a study which leads you to reflect on these words, and helps you to understand the powers of this language, must be rich in moral results to those who devoutly enter upon it?

Let me give you a simple sketch of the course I intend to pursue. I shall begin with a brief history of the English language. We shall see that our language bears upon its face traces of the history of our nation almost as distinct as those which the surface of the earth presents of the revolutions which it has undergone. We shall observe how one tongue has driven out another, even as the people who spoke it were expelled by invaders; how the partial introduction of a foreign race has introduced foreign terms into particular departments of our language; how the progress of civilization, and the increase of knowledge, have made us look around us to borrow from our neighbours words expressive of our new conceptions.

In teaching you what is properly called the grammar of your native tongue, that namely which deals with the connexions of words for the expression of thoughts, I shall not begin with single words and their inflections, but with simple propositions. This appears to me the most natural way; for the great . object of speech is to communicate with others; to communicate some fact of which we are convinced. some feeling we entertain, some judgment we have formed. The history of language teaches us that the earliest words were verbs; words which will of themselves form a statement. Starting with propositions in their simplest form, I shall endeavour to shew you, how with the increasing wants and thoughts and experience of man, more complex forms became necessary, and how differences of termination, as well as new classes of words, were introduced inorder to express differences of relation. As regards exercises in the art of writing English correctly, I shall not set before you, as is sometimes done, all possible confusions of thought and language, that you may reduce these chaotic materials to consistency and clearness; I shall give you sentences correctly expressed, and request you to transpose them, to begin them with some other word, either to introduce some new thought, some fresh limitation of time or place, or else to eliminate some such thought or limitation. In this way, without having any barbarisms suggested to your minds, you will be obliged to prove and exercise your grammatical knowledge, and thus become more deeply and practically acquainted with the resources of your own language.

Let me allude here to my friend Mr Kingsley's Lectures on English Composition. It seems to me that I am to prepare the way for his instructions; to make you feel, that, so to speak, the body of your thoughts must assume a certain shape, before you can breathe into them that spirit which gives to them the force and the grace which you desire. A sentence must be grammatical before it can be eloquent, and · logical before it can be persuasive. We have the same objects in view as your musical professors in their elementary and more advanced lessons. At first they desire to make you perform correctly as to time and note, afterwards they wish you to acquire grace and expression. So is it with us. Whilst my endeavour will be to lead you to cultivate accuracy of language and thought, to make you acquainted with the powers of single words, Mr Kingsley's will be to teach you what constitutes the grace and charm of the writings of our best authors, what gives dignity to their treatment of a subject, what is the secret of that transparency of language which enables the inward spirit to transfigure and glorify the outward form. I am sure, from the thoroughly English character of his own mind, and the extensive acquaintance he has with our English literature, that this will be a labour of love to him, and I can scarcely doubt, a source of great profit to you.

But one part of the secret of transparency in expression it will fall within my province, may it likewise fall within my ability, to reveal. For I shall not only have to deal with the formal arrangement and connexion of words, but with words themselves, and to point out to you the cause of the mighty power which they exercise over our minds, by reference to their derivation. I cannot conceive that any branch of instruction can be more delightful both to teacher and learner, can awaken more sympathy and fellowship. I am sure that we cannot overrate the advantage of using words appropriately, with a distinct knowledge of their primary, derivative, and metaphorical senses. Coleridge declared, that the experience of many years had taught him that to expose a sophism, and to detect the equivocal or double meaning of a word is in nine cases out of ten one and the same thing. To think over the real meaning of our words will encourage in us habits of sincerity, and of watchfulness over the tone of our minds; it will help to deliver us from those hollow conventionalities of expression which we so often meet with in daily life, and which so often disguise what is false in reasoning, heartless in feeling, and loose in morality. Let us not think that laying such stress upon words will make us mistake words for

[Q. C. LEC.]

things: rather will it teach us the difference. free and careless use of words will often delude us into the belief that we know a thing, when we only know about it, and are perhaps only retailing another's opinion about it. From this so pressing danger in our day of shallow information nothing will, I believe, so much tend to save us as a conscientious use of words. In one sense it may be said that we are our whole life long learning the meaning of words; and surely this should make us deal reverently with them when they are ours. What I would say is this. The experience of daily life makes us acquainted with the realities of the world around us, and interprets to us the words which express those realities; life in the Spirit gives us the only true knowledge of the higher realities of the spiritual and invisible world, teaching us the real meaning of the words we read in our bibles and use in our prayers. Now the study of words will help us habitually to connect our words with the realities they represent so far as we know them, and cherish in us a desire to know them better. But if we use words thoughtlessly, we shall to a certain extent be throwing away the lessons we have learnt in life, debarring ourselves from the advantages which words present in enabling us to identify our impressions and distinctly to reproduce them: our words instead of being the means of giving us a further insight into truth will only hamper and

confuse our minds, instead of being suggestive of thought will only help to produce and disguise absence of thought, instead of revealing invisible realities will only tend to obscure them.

There is just one more point with respect to words, with the mention of which I will close my lecture. Remember that almost all words are metaphorical. I believe, that there is not, that in the nature of things there cannot be, any word designed to convey to us a spiritual idea, which is not derived from visible things; it is this above all which renders the study of words so full of ever fresh instruction. The very word derived may help me to explain what I mean. When we say that one word is derived from another, we mean that it proceeds from that other as a stream flows from a fountain, and we imply that it remains in connexion with it, and draws continually fresh supplies from its fulness. We mean the same thing in asserting that one word is the root of another, for it is from the root that the tree derives its growth and fruitfulness. It follows then that if we know the fountain from which words flow, the roots from which they spring, all our growing acquaintance with the meaning of the former, i.e. with the nature of the objects which they represent, will furnish us with ever fresh illustrations of the derived words themselves. start with the belief that words come from Him, who is the Word, both the life and light of men,

and that He has ordained that all heavenly things and relations should be revealed to us through their likeness to their earthly patterns, then all our observation and all our science will tend to the education of our spirits. All our growing acquaintance with the human frame, and with the nature of vegetable life, will give a fuller and deeper meaning to such words as member, branch, fruit, &c., which are metaphorically applied to human society, human knowledge, and human actions. The knowledge of the true meaning of words and reflection upon them will thus help us to keep up in our minds a constant sense of the connexion between the seen and unseen, will make us look with a more reverent eye upon the things around us, and remind us of the sacredness of the relations in which we stand to one another,-may impress upon us the truth that in and through these things, at all times. and in all places, God is speaking to us of Himself, and seeking to educate us for His unveiled presence.

In this way the words we use will be suited to every stage of our intellectual and spiritual development, and we shall feel that there is ever in them a further mystery and meaning which we cannot fathom. This will surely tend to keep us humble and teachable, and help us to sympathize with the ignorance and mistakes of others, for we shall understand with our Christian poet,

And if some tones be false and low,
What are all prayers beneath,
But cries of babes that cannot know
Half the deep thought they breathe?
In his own words we Christ adore,
But angels as we speak
Higher above our meaning soar,
Than we o'er children weak.

POSTSCRIPT.

Becker, in his Organism der Sprache, a work to which I am anxious to acknowledge my obligations, especially in the first part of this lecture, mentions a fact which illustrates in a very interesting manner the views expressed in page 163. "The Abbé Sicard, well known for his successful labours in teaching the deaf and dumb, instructed them, in the use of the sign-language he had invented for them, to make the signs follow in an order corresponding to the sequence of ideas according to the laws of logic; but he speedily observed, that his pupils in their play-hours when they were left to themselves used these signs in an order determined by entirely different laws." See A. W. Schlegel, Observations sur la langue et la literature provençales, p. 27.

ON HISTORY AND GEOGRAPHY.

BY THE

REV. C. G. NICOLAY.

THE subjects which I have to introduce to your notice to day, offer so many points of interest, and extend over such wide and varied fields of inquiry, that to comprehend them within the limits of a lecture is impossible: either the general features must be neglected for the sake of some cherished portion of the detail, or a simple sketch in outline presented, to be filled in with light and shadow, colour and expression, as time and opportunity are afforded.

Considering that, although open to all who may feel an interest in the labours we have undertaken, the lectures of this week are meant to introduce pupils to their future studies, I without hesitation prefer the latter, and shall therefore confine my observations to a brief and very general consideration of the nature of those which I have undertaken to superintend, the mode in which it is proposed to treat them, and the effect which should be produced by them.

To know himself, and to apply that knowledge, is the great duty of man upon earth—could we neither look back, nor forward, this were impossible—that therefore which teaches us our origin, may well claim precedence over other subjects. This is the province of History, as its name implies, for though the word anciently might mean the "acquisition of knowledge by research or inquiry;" so far as we are concerned, it is now rerestricted to "the narration of events."

And this will afford us a subject sufficiently comprehensive, for although I should be unwilling to add to this definition, as has been done, "the narration of events real or supposed," because this would include every event, and place fiction on a level with fact; yet, setting aside that which belongs more properly to the region of imagination, and should be classed under the head of Poetry, how much remains! The events of which it treats, stretch through all time, extend to every place, and embrace every person!

History, being the record of events, has been considered capable of two great divisions, sacred and profane; and this mode of treatment might facilitate the knowledge of it, if it were possible to separate the mortal from the immortal part of man, or to exclude the providence of God from any of the affairs of the world. It does perhaps facilitate the knowledge of isolated facts, but it destroys their application.

Sacred History, as applied solely to the direct dealings of God with man by revelation and inspiration, will be taught by one in whose soul its single truthfulness will shine reflected: but the history of the spiritual part of man as visible in his actionshis yearnings after higher than visible things, his retrospective glances at his divine origin, and the consequent fictitious, but still truthful, mythological wonders, which have served for the diversion of folly, and the instruction of wisdom,—fictions false in the events they record, but true in the ideas they would express: these are the keys of early history, by which alone the several springs of action can be discovered, and by which meaning can be given to affections and passions otherwise childish, if not inexplicable. Without therefore entering on the details of mythological systems, we shall endeavour to trace their origin and purpose, and thus make the spiritual history of the world run parallel with the profane, and give life and energy and purpose to the pictures they present. And this, while it suggests a further division of our subject, by no means constitutes it: the mixture of the imaginative and the reasoning faculties-which, applied to the dim recollections of past ages, have produced the divine genealogies, the metamorphoses, the heroes and demigods of early history-belongs as much to that of nations as of the world, perhaps more. history of the world in its origin and early progress. is too simple to be obscured, until the mind's eye had been dimmed and distracted by the uncertain visions which the course of time presented to it.

The division of history into ancient and modern, is more plausible than real; it is, in fact, only relative. History must have a centre, whether it be general or particular, on its oneness depends its application; nor is it possible to find any time when the affairs of the world came to a standstill, and paused, as if for rest, before the action was continued. We cannot, like a play, divide History into acts and scenes; nevertheless there are great divisions marked out for us, in the early history of the world, the rise of all the great empires, and, in later times, the development and operation of great principles; which form leading marks to assist, not only in the recollection, but the application of the events it records.

In the general sketch of the history of mankind, which I shall attempt to offer to our pupils, it will be my endeavour, so to classify and arrange the subject, that this assistance shall not be wanting; while, on the other hand, I shall be careful not to break its continuity.

"The proper study of mankind is man," says the poet; i.e. a general, not a particular study. Undoubtedly, there are parts of History which affect us more nearly than others, especially as relating to the origin and progress of our own nation. But I have the satisfaction to be able to say, that those

who enter the class of English Literature will have peculiar facilities afforded them of studying these things; that study being so interwoven with the history of our country that it is impossible to separate them. I shall not therefore be under the necessity of directing your attention from the general view of that of the world, to the particular view of our own, though I shall by no means exclude it, but shall endeavour rather to make it a base upon which to build up a more enlarged and lofty edifice, than an object to divert the attention from the subject at large.

Something may be said of the manner of treating History, and which may indeed be deduced from the brief remarks already made. If truthfulness is essential to history, then must history be treated literally; but a bare, dry record of events must be a profitless one also. If memory, imagination, and reason, combine to produce that reasonable soul which distinguishes man from other animals, then must every study offer some food for each and all. It may be considered as more particularly the office of History to minister to the one, but the others may not be neglected; for on them depend, as we have seen, its force and application: and if we satisfy the one by treating History literally, we must the others by treating it practically and philosophically: the first of them will give it an harmonious vibration which will find its response in our own souls, and we shall feel that our own life has been hid with those who were before us, as those of the age unborn is yet hidden in ourselves; and the second will teach us true discrimination, with respect to the events and their application; and by it the moral lessons which our subject affords can alone be developed.

And here we perceive the qualities which History should possess.

Unity of subject has been alluded to already. Unity of purpose is no less necessary: on the one depends our success in tracing the facts detailed, on the other, the effect which they produce; and this, again, may serve to convince us of the impossibility of any good resulting from the separation of the spiritual and the material histories of mankind. Unity of purpose can here only be obtained by tracing events to causes, and those to their great First Cause, by considering man in his nobler relationship, as of divine origin, of godly birth; by tracing the gradual development of the providence of God for the benefit of man, in his lengthened but regular and progressive training for that position which God has designed him to fill, and for the working out of those merciful intentions towards himself, of which History is the evidence. If we cannot unite all men together in this relation, there is no unity in History; if we cannot see God as that from whence we have proceeded and to which we are proceeding; if we cannot trace his providence

disposing events to the final union of all in his own likeness, and the ultimate restoration of the divine image in man, History has no centre. It is rather the confused floating

Of the gay motes that people the sunbeams, Or likest hovering dreams, The fickle pensioners of Morpheus' train,

than the orderly progression of events to a certain proposed and definite end.

And here we are led to another quality equally essential—Utility of application. If History has been well described as philosophy taught by example, I must claim the liberty, already tacitly conceded to the study of literature, of seeking to draw from it such lessons chiefly, if not exclusively, as it more particularly addresses to those who propose to study it in this place.

It is not only to the warrior and statesman that History speaks: they indeed are to be considered as the active representatives of the principles which influence mankind in masses, empires, nations, parties in states; but these principles, like the germ of the mighty oak which the young acorn reveals, have a deeper origin. The causes which have put forward one man as the representative of an opinion, a type of a class, are frequently rather individual than national; and how often may they be discovered in that early training, in those infantine lessons, which it will be the province of those we are to instruct,

to supply to the next generation. The individuals who form the mass, the impulse of which elevates and gives power to the man whose mind directs its energies, no less than the man himself have been submitted to its silent but powerful influence; both the type and the class represented are moulded by it; and though the development of the master-mind can but be committed to the few, all have their share in forming the opinions-of the many, and preparing the instruments of his labour.

Here Biography will afford us powerful assistance; and this consideration will induce me to seek, in the great general divisions I have named, some man or men who may thus represent their own ages, and in whose lives are developed those principles, energies of which constitute their motive power—their cause of progression.

In the course of history it will appear perhaps neither faintly nor uncertainly, that the office of Woman has been in all ages to preserve those principles for which men have had to contend, and which her comparatively retired and reflective life has enabled her to retain in their original purity, while Man has departed from and distorted them by the very violence of the efforts he has made for their preservation.

Daily events shew us how hallowed and eternal truths are caricatured, as History teaches us they have been throughout time, even in the endeavour to extend and propagate them. We are not therefore to be surprised, if to her teaching is to be traced their reproduction from time to time in their genuine singleness and power, when exaggeration and distortion have transformed them into monstrous apparitions, so unlike their original that they would be ridiculous were they not destructive.

The earlier the teaching, the more effect it produces; the impatient yearning after knowledge in children; the expansion of the young mind to any, even to unreasonable, dimensions for its reception; the intense thirsting after that fulness which can alone satisfy; cease in most when active labours become necessary—of these powers Woman has the sole and entire control, these desires she alone can satisfy, for, in this respect, the most important, if not the longest period of life.

If the child is father of the man, to her belongs the training of that child for the future work which the man is to perform; to her therefore it becomes a most holy and imperative duty, to search out and secure to herself a knowledge of those immutable and essential principles which actuate mankind—which, whether in their truth or their falsehood, their integrity or their exaggeration, influence the minds of men, but which in their truth and integrity only, can influence them to those ends which God has prepared for them.

Let it not be said then, that to read History

practically and philosophically is not womanly: let those content themselves with barren facts, who see in education nothing but a preparation for the follies of this world—but let those who look beyond it be content only with the fruits, seek deeply into the meaning and application of things, and they will confess with our first historian of character, that, not only of Revelation, but of History generally it may be said,

> Whatsoever written is, To our doctrine it ywritten ywis.

If these qualities of unity and utility are essential to History, there is one other which is perhaps even more so—which indeed is necessary to constitute History, viz., Truthfulness. It is obvious that any fiction may have these qualities: we might invent a moral tale in which they should be conspicuous, but it would not be History.

But how, with reference to our subject, shall we answer the question, What is truth?

It may be well to state in the outset, that it is only the details of History that are in any, the least degree, uncertain; but even in these truth may be found, though the positive facts may not be determined; as truthfulness gives the historic character to the qualities of unity and utility, so do they discover the latent truth in uncertain events. That in which the providence of God is apparent, that in which the teaching of God is evident, is a fact in History what-

ever other evidence it may need; and that which wants these, if such can be found, however much a fact, is utterly useless, and like the barren vine, neither productive of fruit, nor good even for fuel.

This naturally leads us to the consideration of the sources of History.

Modern science has not failed to discover, in the ascending dynasties of the ancient world, astronomical back reckonings indicative of the consciousness in man of divine origin, and the necessity for divine union; these of course resolve themselves into chronological calculations, and have no connexion with History, except as they shew how impossible the ancients thought it, to separate the spiritual from the temporal life of man—every ancient race of kings has its origin in the Deity: we have astronomical æras, æras of demi-gods and heroes, before man appears in his proper self, and when he does appear, History is interwoven with religion, and the mythological element is for a long time too powerful for the purely material.

This, perhaps, it may be said, was consequent on the priests in early times being the poets and historians—of the princely and sacerdotal office being united—but, if so, what does it prove?—only with the greater force what has been already stated, of the predominance of the spiritual element which marked the opening history of the world, and may perhaps mark its close, when we return to that appreciation of our relationship with the Deity even in our temporal state, which is the great secret of our life, both here and hereafter.

But, on estimating the early histories of nations, we must remember that they had not the light which we have—that afforded by revelation, and which will enable us to trace the origin, and in some degree reconcile the conflicting systems, of heathen nations; to see how long and how earnestly God strove with men, and how their wisdom is foolishness with him—by it we shall trace the great events recorded in Holy Writ, which directly concern the world at large, shadowed forth in them all—they will be seen to form the basis of every superstructure subsequently raised by the invention and imagination of men, and we shall recognize the power of truth even when more than partially concealed by falsehood.

And as the earliest profane history is found in religious traditions, as it is followed by political and social traditions, in the childhood of nations, as in the childhood of men, the poetical element predominates; and this is true, not of ancient but of modern nations, as true of those now existing as of those long since past and gone.

The story of Arthur, of the Cid, of the Paladins, of Charlemagne, the romances of early Germany or India, bear the same relations to present history, as the poems of Homer to the Grecian, that is past; the ballads of our own borders answer in

[Q. C. LEC.]

historical relation to those from which the early history of Rome might have been originally compiled; not that they can be depended on for minute facts—and it is in seeking to establish these that men have erred, and contentions and disputes have arisen, and parties and opinions been formed—but that they speak the veritable language of the times nearest those of which they treat, and are the living representatives to us of their principles of action.

Gradually, as History developes and events become regularly chronicled, their certainty and their number become greater, and our knowledge of History ought to increase—and it will do so if we cling closely to our two leading qualities, Unity and Utility; but it may be remarked, that while we become more engaged with facts we become less distracted by doubts, the difficulties therefore in either case may be fairly balanced. In the one the leading characters. the types only, are afforded us; in the other, perhaps, we have to seek them; in neither shall we progress without our own labour. And this labour as it progresses, though it may become less amusing, will certainly become more interesting-the change from the imaginative and poetic expression of men's wants and feelings to the more direct effect given them by laws, revolutions, forms of government, and their declaration, even if it be in the set form of Acts of Parliament, cannot fail to give a substance to that

which before might be thought shadowy and unreal, so that documentary evidence will be found the most satisfactory guide to our judgment, whenever we may be able to produce it.

There is, as our historical experience increases, an application of it which may be made most useful: this is Parallelism, not indeed of men, but of events and causes. If certain leading principles and truths have actuated and continue to incite men to action, it may be expected that similar results will always be observable; this we shall find not unfrequent, insomuch that pages of History might be transferred without losing their appropriateness.

History thus teaching us by experience, and combining present events with those of past ages, will assure us of the truth of the maxim of the Roman philosopher, that "not to know what happened before we were born, is to remain always a child," and we shall be thus children in understanding, so long as we are unable to see something of the providence of God in its unity of design and utility of purpose in the history of man, as we do in that of the creation, or his moral object in both-if we fail to derive from all our historical studies daily proofs of the great truth, that he will render to every man according to his works; and that, however insufficient his retributive justice, it is yet apparent even here; and that there is even in this life a reward for his servants who finish the

work he has set them to do, and a certain punishment for those, who, forgetful of him, live only to themselves, look on the world only as it may serve their purposes, its inhabitants as tools by which they may obtain the object of their desires—its riches and honours. To this History should supply the antidote, for if it do not teach us our connexion with one another as children and servants of the same Creator, differing only in the offices he has sent us to fulfil, and the labours he has appointed for us to perform, it can only point to the mouldering records of past ages, and say with the Wise Man, "Vanity of vanities, all is vanity."

Geography has been termed the handmaid of History—as such I purpose to treat of it—nevertheless, a subject so extensive must, of necessity, assume a distinct character, and inasmuch as the relation it has to History is rather found in the results of the study than the study itself, it requires a separate consideration; but I would venture to suggest to those who propose becoming students of either, the propriety of uniting them.

History cannot certainly be understood without some knowledge of Geography; nor can the study of Geography be of practical importance unless it be applied to History.

Without it we cannot understand why certain countries have exercised certain influences on the progress of the world; why certain places have been

the theatres of particular actions, what configuration of surface has facilitated the earlier and later migrations of nations, the development of arts and sciences, and the progress of civilization.

From it we may learn why, in the providence of God, cities first appeared in the rich valleys of the Euphrates and the Nile; why, on the one hand, an inland territory should have been selected as the seat of that nation which was to transmit the oracles of God to posterity; or, on the other, a peninsula as the residence of the volatile and imaginative people, from whom the world has, in so great a measure, derived its literature and laws, its arts and sciences; why, in the early ages, the close proximity of the shores of the Mediterranean should have afforded similar facilities of communication, which have in later times been found in the wide-extended surfaces of the Atlantic and Pacific Oceans.

The term Geography is of a very extended signification. If you talk about the Earth, it may be of its surface, its irregularities of conformation both in appearance and material; but this you will say is, properly speaking, Geology. And these irregularities, producing as they do corresponding varieties of productions, vegetable and animal, nay of man himself, lead us into the sister sciences of Botany and Zoology. The motions of the heavenly bodies affecting the very form of the Earth; the form of the Earth itself securing that motion which has been given

it, as so effectually shewn by our valued colleague, Mr O'Brien, in his Lecture delivered on Monday; the variations of heat and cold; the motion of the fluid parts of the earth; the change of seasons, days and months, and times and years; still more appertain to that of Astronomy. Yet some portion of all these must be understood when I speak of physical Geography, and without this portion, we shall be at a loss to illustrate much, otherwise dark and uncertain in History; we shall lose more that is entertaining and instructive.

It must be evident that the condition of nations depends much on the position in which they are placed. In the two cases already alluded to, the concentration of the Jewish influence was, to a great extent, the result of its situation, as was the diffusion of that of Greece, and this is particularly remarkable in the history of our own country, our insular situation having had so great an effect on our national character, and that again on our position among nations. But yet smaller things exercise some control in these matters,—the fertility or barrenness of the soil, the possession or want of minerals and metals, nay, the kind which may be possessed, is not without some power in disposing it.

Of this we have examples in countries where what are termed the precious metals abound, as compared with those in which the more useful are found. Again, if we take the vegetable productions of the earth, and compare their effect in modifying the conditions of the people who occupy its different regions; the rich alluvial Delta, with its corn and rice; the wide extended undulating prairie, producing only food for cattle, who again must furnish that for their nomade inhabitants; the forests with their wily hunters; the mountains, with their freedom-loving, imaginative, melancholy children; the lands of the vine and the olive, of poetry and song. Or consider the effect of heat in relaxing the muscular fibres, and abridging the animal energies, while it inflames the blood, till but too frequently, as our great poet of human nature expresses it,

Passion having the just judgment collied, Assays to lead the way;

or of cold, in rendering the human frame torpid and machinal, until, like the animals characteristic of frigid regions, the mind almost hibernates, and the imagination is dead. Or perhaps even more, if we trace the progress of population and civilization, and see how the earth, not in its form only, but in its productions, whether animal, vegetable, or mineral, has been adapted to that purpose, and how the earlier developed forms of the two former have retired before man, and the later, with the application and use of the third, have continually followed. We shall feel that in the history of the human race these must have exerted such power, that it cannot be appre-

hended without a knowledge of them—that physical Geography is indispensable to the interpretation of History—indeed, so great has been this power that Dr Pritchard has shewn it to be sufficient to account for all the varieties of character and condition which, in these last days, is apparent in the human race.

This division of the subject of course includes the distribution and proportion of the solid and fluid parts of the Earth's surface, and will afford opportunity for the consideration of its natural divisions—but as these are not always the limits, though they have always influenced the position and relation of nations—it will be necessary to consider the artificial divisions, into which at various times the surface of the Earth as then known has been apportioned.

Various influences have concurred to arrange them. Public as well as private considerations, the latter frequently with more force, because more personal to the contracting and disposing parties, have combined to alter them, so that a knowledge of physical Geography, and especially of the distribution of people, nations, and languages, will much help us to apprehend how these interests have arisen, and why these considerations have been entertained, and not unfrequently how they have been checked, and their operation frustrated by natural causes from the commercial, national, or physical reasons, which have influenced the results. We may perceive that, though unnatural in some respects, they are natural in

others, and it may be a question whether the latter, as relating more directly to man, are not worthy of the greater estimation.

From physical and political Geography naturally arises another division of the subject, descriptive Geography, which unites the effects of both, and is capable of minute subdivision; but in these days of laborious topographical research, of statistical enquiry, and microscopic gazetteering, to treat this in its full extent would be the labour of a life, and of all labours that which would reward itself the least. Such investigations for the purposes of reference are highly desirable, and in detail are eminently useful, but as part of Geographical study much to be deprecated. Yet some knowledge of both is essential: without a clear apprehension of the localities where great events have occurred, those events are often themselves incomprehensible, and on the relative, numerical, commercial, and political strength of nations must depend our estimate of the actions performed, and the effect produced by them on the history of the world.

Babylon, Jerusalem, Athens, Rome, are to our minds indifferent, if we are ignorant of their respective characteristics; we are interested in and appreciate their relative importance, if we can compare them.

But to the understanding of them a further

division will be found necessary, and this may be distinguished as mathematical Geography, and will include what is usually termed the Use of the Globes; without this no general knowledge of the surface of the Earth can be obtained, no representation of it can be understood. The spherical figure of the Earth may be aptly represented by a globe; but a globe cannot be made sufficiently large for all the purposes of Geographical study. If you take a ball and endeavour to make a cover for it, the effort will shew the difficulty of changing a flat into a spherical surface. If by cutting gores you at length succeed, it will be plain, that in no way can these be made to coincide, or be represented, without interruption. It follows therefore, that every attempt to represent the surface of the Earth on a plane must be more or less incorrect, and on the resolution of this difficulty must depend the justness of any calculations we may make as to distance or situation: we shall find that one mode of projection will assist us to the former, another to the latter, and the nearer we approach to both, the further we shall recede from either, so that all we can hope for is a sufficient approximation for useful purposes.

The celestial and terrestrial globes will afford us means of becoming acquainted, as it were by experiment, or I might almost say by observation, with the effect of the annual and diurnal revolution of the Earth, with reference both to time and climate; and the minute effects on the former will be rendered appreciable by Mr Taylor's ingenious apparatus attached to his perennial globe, which, while it enables us to contemplate the Earth under the same conditions as Hipparchus or Ptolemy, will at the same time teach us the necessity of rectifying all human works, and the imperfection of all human endeavours; for while we admire the ingenuity of the contrivance, its clumsiness and difficulty of use form the strongest contrast to the ease and beautiful progression of the order of nature.

Perhaps no science—Astronomy only excepted, if there should be exception in any, or if science can in reality be divided—perhaps no science affords so many proofs of the wisdom and beneficence of the great Framer and Controller and Supporter of the universe as Geography; none a more apt commentary to the ascription of glory to Him on this account by the host of heaven: "Thou art worthy, O Lord, to receive glory and honour; for thou hast created all things, and for thy pleasure they are and were created." And, perhaps, this is even more strikingly displayed in the progress of the science than in the science itself; at least, the application is more evident, for we shall see while God is disposing the surface of the Earth and its productions for the residence of man, man himself is following his predisposing providence, and groping his way over, and feeling for a knowledge of it as one blind, and

attaining that knowledge as it were by permission and dispensation, not of his own mind.

The observation so recently made in this place—that the ancients obtained their scientific knowledge by process of reasoning without observation—while it was held to account for their errors, was in some degree considered as to their credit. I should be the last to question, or perhaps to limit, the mental powers of the giants of those days; but I must ever consider the insufficient result of their labours in this, as in all other things, an illustration of that of which St Paul speaks, when he says:—"In the wisdom of God, the world by wisdom knew not God:"—the simple practical method of observation wanting, they were as far from truth in many things, as if they had wanted that wisdom for which we admire and venerate them.

The early representations of the Earth as a flat surface—to say nothing of the mythological fictions by which such a supposition was made more apparently practicable—are as apt an illustration of this, as their misapprehension of the facts of Natural Philosophy. Examples are to be found in the supposition of Alexander, that on reaching the Eastern extremity of the world he might return by sea, i. e., as I apprehend, by the Caspian and Black seas, which indeed, led to the first real knowledge of the former, as in more modern ages in the endeavour to penetrate through a Continent, whose

vast rivers should have given sufficient indication of its impossibility in their volume of waters shewing the size of the basins of which they are the outlets.

And here again we see how the two sciences, Geography and History, insensibly unite, so that we can scarcely define their limits. The progress of discovery belongs as much to one as to the other, insomuch that the final destinies of England and Spain were in no small degree dependant on the delay in accepting the proposals of Columbus, forwarded to this country by his brother.

The names of Hanno, Nearchus, and Patrocles, may perhaps now rather be claimed by geographers than historians, but those of Vasco di Gama, Columbus, Cabot, Cartier, Raleigh, (and may we not add Brooke?) have been enrolled by the latter as the founders of kingdoms, while the discoveries of navigators and travellers have had no trifling effect on the political relation of nations and conditions of the world—and here, perhaps, will be found not the least interesting portion of this Study. I can fancy many of my own or of yet riper years, not unwilling to say, in words familiar to our infancy:

Unrol the great map, let us trace them again Over mountain and sea, through forest and plain.

Such are the subjects which I conceive should be treated of comprehensively in a course of Geography. Of physical Geography it will be my endeavour to convey such general notions as may illustrate what else I have to say, and serve as a base on which those who have the time may, when the opportunity is afforded by our zealous friend Mr Ansted, in a course of Lectures he proposes to deliver at some future time upon this subject, erect a more elegant and finished superstructure.

This will relate to the world at large, not according to any arbitrary or conventional divisions.

Of political Geography I must treat more in detail; with Chronology it forms the voussoirs of the arch of History, supporting it on either side. It shall be my endeavour to impart a clear and definite notion of the position and outlines of all empires, and important kingdoms, and states, and to resolve them into their elements.

The necessity for this will be especially apparent in the history of the middle ages, when the great fiefs of the Crown engrossed the chief political power. And as physical Geography will illustrate the character of the earth at large naturally, so will descriptive that of those artificial divisions which put us in possession of the materials necessary for comparison, not only of one state or kingdom with another at the same time, but with itself, whether under the same or different conditions, at several distinct and perhaps distant periods.

While of mathematical Geography I shall only

treat, in so far as shall be found necessary to illustrate and explain the other divisions, and make the material which is to assist our demonstration comprehensible to us.

And with reference to this division, I may enter the same disclaimer as my friend and colleague, Mr O'Brien—that no mathematical knowledge, properly so called, will be necessary to comprehend it: simple, I will not say unassisted, common sense will enable any one to obtain a fully practical understanding of this so often considered abstruse subject, not only in its application, but in its nature.

It now only remains to say a few words in explanation of the mode I purpose adopting in the pursuit of these Studies.

Of the two organs by which the mind is brought into operation on any new subject—the Eye and the Ear—I prefer the Eye; because the impressions made upon it are certainly more definite and more indelible.

I shall therefore endeavour by the aid of maps and diagrams, no less than by reference to books, to illustrate the subjects on which I am to treat, as far as it may be practicable; but, unfortunately, it is not by any means always so, and if it were, it labours under the disadvantage of involving a loss of time. As in mechanics, so in mental operations, what we gain in power we lose in speed; the greater part therefore of the instruction given, must be

through the ear. I may add, that neither can be of any avail, if the senses alone are affected and do not bring the mental faculties into operation. There is no easy road to knowledge; it can, like any other good, be only the reward of labour; like every other, even the greatest, only the result of "patient continuance in well-doing;" but I am bold to say, that with reference to the subjects of which I speak, in few will it be found more satisfactory; they will furnish the key to every event, the scene for every action; deserted places will become peopled, and among the crowds of our cities the shadows of departed worthies will become dimly visible: we shall converse with the great and mighty of the earth—the true aristocracy of the world—and imbibe from them the lessons of wisdom, and as what is past becomes familiar to us, we shall have the clearer insight into the future,

Till old experience do attain
To something like prophetic strain;

we shall feel ourselves citizens of the world—interested alike in all its changes whether at home or abroad, and perhaps comforted, under what otherwise might have been too dark and uncertain a providence for our unassisted strength, by the knowledge of its historical, and therefore necessary, consequence.

NATURAL PHILOSOPHY.

BY THE

REV. PROFESSOR O'BRIEN, M.A.

In the course of instruction we propose to give in this institution, it will fall to my lot to lecture upon Natural Philosophy; a subject of great variety and extent, embracing a number of sciences, the study of which is most interesting, and well calculated to improve the mind, by giving it habits of sound reasoning and accurate observation.

These sciences are for the most part within the grasp of every mind, and a fair knowledge of them may be acquired without any previous preparation or training in the processes of abstract reasoning; some of them however are difficult of comprehension, and intelligible only to those who know something of mathematics.

I must not reckon upon any mathematical knowledge in those who are likely to attend these lectures, and therefore it will be necessary for me to avoid any reference to the technicalities of that science, and to leave out such parts of Natural Philosophy as are difficult and abstruse. I shall therefore take care to bring before you only such points as may be made clear and intelligible to persons unacquainted with mathematics; indeed, the shortness of the time that can be spared for the study of Natural Philosophy here, will oblige me to confine my instruction to what is obvious and easily understood; and it fortunately happens, that, by going only so far, a great part of all that is useful and interesting in the subject may be readily learnt, and a very fair understanding of the different sciences of which it consists attained to: in fact, I know no subject in which so much of what is valuable lies so near the surface, and requires so little exertion to get at.

I shall now state generally what Natural Philosophy is, and explain briefly the nature of the principal sciences of which it is composed. I must first observe, however, that Natural Philosophy and Natural History are often confounded, though they are really quite distinct from each other. Indeed, the term Natural Philosophy is very vague and general, and is by no means suitable to designate the collection of sciences to which it is at present applied. Originally this term was given to every branch of knowledge or speculation relating to the natural world, as distinguished from the spiritual, and such, no doubt, is the proper meaning and extent of the term. But now it is usual to exclude every thing relating to life and organization from the province

of Natural Philosophy, and to consider the material and inanimate world alone as belonging to it. The object of what is now called Natural Philosophy is simply to describe, explain, and account for, as far as may be possible, the various phænomena of the material inanimate universe, leaving to Natural History, together with what is called physiology, all that relates to life and organization.

Natural Philosophy is partly descriptive and partly theoretical, its object being to describe the phænomena of the material world as well as to explain the causes of them. In ancient times Natural Philosophy was almost entirely theoretical; philosophers contented themselves with various speculations and theories which were propounded without much reference to the actual state of things; little or no exertion was made to observe facts and reason from them; and, consequently, these theories and speculations were in a great measure worthless, though often highly ingenious. In modern times a different course has been pursued; in the first instance, previous to any reasoning or speculation, the phænomena of the material world have been carefully observed and systematically described; indeed, a great portion of Natural Philosophy is purely descriptive, being nothing more than a detailed and orderly account of facts observed. Then these facts being carefully put together and compared, lead to the discovery of the causes from which they spring, and the laws of the

material world, and this gives rise to the theoretical part of Natural Philosophy.

The putting together and comparing of facts so as to discover the causes from which they arise, is called Induction, and the various sciences which constitute Natural Philosophy are therefore called the Inductive Sciences.

It will be necessary for me to dwell more upon the descriptive part of Natural Philosophy than the theoretical, because the latter part often requires an acquaintance with the principles of mathematical reasoning; at the same time, wherever it is possible, I shall always endeavour to account for the facts I describe by shewing how they result from those simple laws which regulate the material world.

Natural Philosophy includes a number of sciences, the chief of which I shall now briefly state and describe, in order that you may better understand the nature and extent of the course of Lectures which I propose to give on the subject.

The most interesting and certainly the most perfect of these sciences is Astronomy, and it will occupy a prominent place in these Lectures.

It was cultivated, and with considerable success, in the earliest times; ancient writings on Astronomy are extant shewing what advances it had made when other sciences of observation were unknown; and even now we employ observations made by the Chaldeans many centuries before the Christian era. It

is certainly not difficult to understand why Astronomy alone of all the natural sciences should have made such progress in ancient times, in countries enjoying a clear atmosphere, and warm climate; for, in the early state of society in such countries, the care of flocks and herds formed the chief occupation of men, and required them to spend much time in the open air at night. To men thus employed the heavens would be an object of interesting and curious contemplation, and the motions of stars could not fail to It is evident from the Book of Job that the principal stars had received names in the earliest times we have records of, and that the rising and setting of certain constellations before day-break had been fixed upon as signs of the different seasons. The progress of Astronomy among the Chaldeans and Grecians was considerable, and the same may be said of the Hindoos, and to a certain extent of the Chinese. In modern times the advance of Astronomy has been most remarkable, and it is now the first of sciences: Astronomical observations are the most accurate and extensive that have been ever made, and astronomical reasonings and speculations are more profound and satisfactory than any other. At the same time it is more practically useful than any other branch of scientific knowledge, for without it the navigator could not direct his course securely over the ocean, the traveller could not find his position in unknown regions, the surveyor could not construct maps, nor the historian determine dates and epochs. And there is no science which affords so much scope to the imagination, or so much matter for serious contemplation. It reveals the vastness of the universe, it points out worlds beyond worlds whose number cannot be told, whose distances are great beyond conception, and it conveys to the mind the deepest and strongest conviction of the glory and greatness of the Creator.

In my Lectures upon Astronomy, I shall endeavour not merely to make you acquainted with the technicalities and rudiments of the science, but also to give you an interest in the practical part of the subject, by making you familiar with the most remarkable of the heavenly bodies and constellations. so that you may often be induced to look out for them yourselves, and by explaining to you the construction and use of the principal instruments which astronomers employ in observing the heavens. I hope to make you understand the methods by which the distances, magnitudes, and even the weights of heavenly bodies have been determined. the application of Astronomy to Navigation and to Geography, the manner in which the dates of ancient events have been made out or verified by astronomical calculations, and a variety of other points of interest in the science.

The next subject in point of interest after Astronomy is perhaps Optics, or the science which treats

of light; it is a subject which requires a variety of experiments, some of them very beautiful. I shall endeavour to shew you several of these experiments as soon as we shall be able to get together the proper apparatus. There is one difficulty in optical experiments which often proves a serious hinderance, namely, the uncertainty of having sunshine in this climate; for most optical experiments require a strong glare of light, and no lamp but the oxyhydrogen lamp is sufficiently powerful for the purpose.

The science of Optics was much studied by the Greek philosophers before the Christian era; we have still extant a treatise written by Euclid on the subject, it is ingenious enough, but very defective in principle, and shews that little progress had been made in the science in those times. The preface of this treatise is very curious, its object is to prove the truth of an extraordinary theory of light which was introduced by Aristotle, and which prevailed in the world for many centuries. It was this, that the rays of light do not come from the sun, or other luminous body to the eye, but that they issue from the eye and strike the sun, and that the eye perceives the sun by the striking of these rays against it. In fact, ancient philosophers supposed that the rays of light were so many invisible feelers issuing from the eye and making sensible the existence of distant bodies. This strange idea of the nature of light prevailed until the eleventh century, when Alhazan, or Al-Hassan, a Saracen, who was highly distinguished as a mathematician and mechanician, wrote a celebrated treatise on Optics, still extant, at the commencement of which he shews with great pains that this curious theory of light was contrary to fact, and ought to be abandoned. It is remarkable that it should be necessary for a writer on Optics to commence by proving, at considerable length, that light comes from the sun.

In modern times there has been much difference of opinion respecting the nature of light. Some philosophers, and Newton among the rest, have supposed that light consists of extremely minute particles which issue from the sun and other luminous bodies, and move in straight lines with extreme rapidity to the eye; and that the sensation of light is produced by these particles striking on the eye. This is called the material or Newtonian Theory of light. Other philosophers, among whom must be reckoned the most eminent writers on Optics in these times, have supposed that light, like sound, is nothing but a vibratory motion transmitted through a most subtle and highly elastic medium or gaseous fluid, called ether, which pervades all space as far as the remotest visible stars. The particles of the sun and other luminous bodies are supposed to be in a state of rapid vibration, and this vibration of course communicates itself to the surrounding ether, and, in the same manner that the vibrations of sound are propagated through the air from sounding bodies to the ear, or waves spread over the surface of water, so the vibrations of luminous bodies are transmitted through the ether to the eye, and produce the sensation of light. This is called the vibratory or Undulatory Theory of light.

There are many serious objections to the Material Theory, and it is now generally abandoned, some of the most remarkable properties of light being altogether inconsistent with it. There can be very little doubt of the truth of the Undulatory Theory; it explains in the simplest and most satisfactory manner every property of light, and there is not a single objection that has been successfully urged against it; indeed, all the objection in itherto advanced have not only been completely answered, but have proved to be some of the strongest confirmations of the theory.

In my lectures on Optics I shall endeavour to bring forward the most interesting parts of the subject, and, where it is possible, to illustrate it by models and experiments. I shall make a point of describing and explaining the construction and use of the principal optical instruments, such as the telescope, the microscope, &c. I shall also dwell upon those parts of Optics which have special reference to painting and perspective, and among other things I shall explain to you fully the methods of making photographic pictures of various kinds.

The next subject I shall mention is Acoustics, or the science which treats of sound; its object is to shew that sound consists in vibrations, which are communicated by vibrating bodies to the air, and spreading through the air strike on the ear and so produce the sensation of sound. In my lectures on Acoustics I shall describe, and as far as possible illustrate by experiment, the principal properties of sound, and I shall explain the nature of vocal and articulate sounds; but my chief object will be to dwell on every thing relating to musical sounds and intervals, which is perhaps the part of Acoustics most likely to interest you, inasmuch as it will greatly facilitate your progress in the theory of music and harmony.

The principal phænomena of Heat, Electricity and Magnetism, I shall also introduce into my lectures: these are subjects of great practical importance, and very interesting on account of the various striking experiments by which lectures on them are generally enlivened. When I come to these subjects I shall explain to you every thing connected with the great atmospheric phænomena of Dew, Rain, Winds, Thunder and Lightning, &c; in fact, most of what is called Meteorology. I shall also describe some of the principal practical applications of Heat, Electricity and Magnetism, such as the Steamengine, the Electric Telegraph, the method of making casts called Electrotype, &c. &c.

The last subjects I shall speak of are the Mechanical Sciences, Statics, Dynamics, Hydrostatics, &c. These form the most difficult parts of Natural Philosophy, and therefore I shall not dwell long upon them as separate subjects. Mechanical Principles are, indeed, the basis on which the whole of Natural Philosophy rests, and it will be impossible to go through a course of lectures on Natural Philosophy without often introducing and appealing to mechanical principles; but I shall be able, without difficulty, to explain and make use of these principles, when occasion requires, without going through any previous course of instruction in Mechanics. not, however, neglect Mechanics; I shall devote a short course of lectures to the explanations of the Laws of Motion, the Mechanical Powers, &c. There is one part of Mechanics which is simple and interesting enough, namely, Hydrostatics, including Pneumatics, or the sciences which treat of the pressure of water, air, and other fluids; these sciences admit of many experimental illustrations, especially experiments with the air-pump, and are therefore more suitable to my lectures here than other parts of the science.

Having made this statement of the subjects it will be my duty to lecture upon, I shall conclude by observing, that I shall always, when opportunity offers, direct your attention to the manifest traces of design, the tendency to good, and the proofs of

unity of purpose, which are perceptible on all sides to those who patiently and thoughtfully examine the wonders of nature. This is indeed the province of Natural Theology in an especial manner, but it is also part of Natural Philosophy, and greatly adds to the value and interest of the subject. There are other branches of knowledge which display more of the innumerable contrivances by which we trace the hand of the Creator, and perceive his care for the happiness and welfare of his creatures; but Natural Philosophy discloses the immensity and infinite variety of the universe, and reveals those wonderful and mysterious agencies by which it has pleased God to regulate and sustain his Creation, and therefore it is a science better calculated than any other to declare the glory of God, and affect the imagination with deep and solemn thoughts.

The Lecturer was not aware that the Introductory Lectures were to be published; he can, therefore, only offer the above as the substance of what was delivered at Queen's College last May, with the omission of all that was illustrated by experiments, and with some alterations.

THE PRINCIPLES AND METHOD OF TEACHING.

BY THE

REV. THOMAS JACKSON, M.A.

I CONFESS that had I been permitted to choose for myself the subject of a course of lectures to be delivered by me from this chair, "The principles and method of Teaching" is almost the last which I should have selected. That subject has been assigned to me by others, to whose decision I bow with respect.

The difficulty which I feel does not arise from indifference to the question. I can conceive of none more important to the teacher, whatever may be the class of his pupils, and the nature of the instruction he has to impart. Upon your knowledge of the principles which lie at the foundation of all teaching, and upon your practical skill in the use of the various methods which have been invented to give full action to those principles, depends, in a far greater degree than

most persons suppose, the amount of your success as instructors. That skill is just the measure of your efficiency. You may know enough of language and science, in their various kinds, to exhaust the intellect of a Newton; but if you are unable to impart that information in its due proportions, you will fail in forming the mind of a child.

My difficulty rather arises from my deep impression of the worth and greatness of the subject; of its extent and comprehensiveness; of the minute and various information which a full discussion of it implies. For he who penetrates beneath its surface, and, not content with surveying its length and breadth, tries to measure its depth also; in a word, he who examines the details of the matter to which it strictly applies, finds himself insensibly meddling with the whole range of knowledge. His ought to be an insatiable thirst for information, he should carry something like an encyclopædia in his head. That master treatise of Aristotle, his "Rhetoric," touches not merely upon the universal method common to all oratory, but enters into details concerning the matter proper to each kind of oratory. A formal treatise upon "the principles and method of teaching" would be, in the highest sense of the word, the rhetoric of the teacher.

But it is not merely the dignity and comprehensiveness of the subject which constitutes its difficulty. We have not at present any complete and well con-

sidered works upon it in the English language. among the grave and thoughtful spirits of the age, there are any searching for a novel field of inquiry, this might be safely recommended to them. they ought to bring to that inquiry a mind combining the calm, philosophical depth of Bishop Butler, with the clearness and precision of Archdeacon Paley. Some persons have indeed published little pamphlets, setting forth the advantages of this or that mode of putting a question, or framing an ellipse, and others have applied true principles of method to certain departments of science; and we are deeply indebted to them for their labours: but these efforts surely must not be confounded with the discussion of method. That which the tutor of Alexander the Great did for oratory, has yet, in this country at least, to be done for the teaching of children.

In entering, then, upon our work together, we cannot go to our book-shelves, and select a series of well-considered treatises from which to compile our lectures. We must make much of our way for ourselves. We are about to break up new ground, and to traverse together untried and untrodden regions. Hence how calm and reflective and undisturbed ought to be the mind of him who essays to lead the way. Such, I confess, is not my case at present. My lectures will be prepared amidst much distracting occupation. In many respects they will resemble,

both as to matter and style, the remarks of a man who is thinking aloud.

From what has been said, it may be inferred, as a corollary, that we should be anything rather than over-confident, or dogmatical. While we endeavour to build up a theory on the subject, we invite you to verify every step of that theory by your every-day experience. As in the cultivation of the soil, the practical common-sense of the farmer often corrects the errors of the agricultural chemist; so in the education of the mind, the wisdom of a devout and patient teacher will improve upon the suggestions of him who speculates upon method. In fact, we must not think lightly of the skill and power of English teaching, because we have not formal treatises upon the science of Pædagogy. was once remarked to me by an intelligent Russian, that, while in Germany the science of instruction was, generally speaking, most deeply studied, in England the art was most diligently practised.

What, then, do we understand by the principles and method of teaching? Given the human mind, and given all that can be taught under the general heads of language and science, it is required to furnish the former with the latter. But this is not a complete account of the problem we are to endeavour to solve. For teaching, in its full sense, does not signify merely the imparting of knowledge; but the proper and proportionate development of the mental faculties,

and the formation of proper habits of reflection. It implies, if not directly moral discipline, at least such mental discipline as must influence the conduct and character. You are then so to teach as to fill the mind with stores of well-chosen knowledge, and you are to apply for this purpose certain general principles of instruction, and arts or methods of various kinds arising out of those principles. And if you truly apply these principles, and the artifices which conform to them, (which are to them, I had almost said, as the light to the Sun,) you must commensurately develope the powers of the human mind and heart.

Now what are the principles which lie at the very foundation of all teaching? When you wish to explain anything, to transfer it from your mind to that of your scholar, or when you wish to develope in their due proportion the properties of his mind, how do you proceed? Be your scholar an infant of five years old, lisping some artless inquiry, about what bread is made of; or one of mature years and talents, to whose understanding you wish to unfold the mechanism of the heavens: we can conceive of no principle upon which you are to proceed, but either that of taking the subject-matter to pieces, or that of putting it together. You must either separate the whole into its constituent parts, or construct the whole out of the constituent parts. Or again, you must either grant the general principle and rule,

[Q. C. LEC.]

and shew its truth by its application to particular instances; or you must infer the general principle and rule by the careful comparison of particular instances. These two broad principles lie at the basis of all teaching. Every teacher applies them both, more or less: some after philosophical investigation; some after long practice; some by a happy intuition.

All methods are but artifices used in the practical application of these great principles. Whether applied to the construction of buildings, or the forms of the language in which instruction is given, or to visible objects by which it may be expedient to illustrate that instruction, all method is subordinate to these two great principles of teaching. The length, height, and position of desks, and benches, and tables may infinitely vary,—the distribution of time may be, comparatively speaking, arbitrary,-the value of this or that mode of shaping a question, or turning an ellipse, may be determined by the idioms of a language, the tone and temper of a teacher or pupil, or by the subject-matter of a lesson,—the use of a black board, or an experiment, or a picture, may or may not be desirable in that lesson;—but it must be characterized, more or less, by induction, or deduction, and by synthesis, or by analysis. Having said thus much, it will not be necessary for us to dilate on the distinction between principles and method in teaching *.

^{*} It has always appeared to us most illogical to speak of the

It will be our duty to investigate, at the very outset of this course, the nature of induction and analysis; and the distinction, properly speaking, between synthesis and induction. We shall also endeavour to explain the difference between the state in which things are found, the manner in which their nature is to be investigated, and that in which it is to be taught. As the object of our course is practice rather than theory, we shall endeavour to apply, in distinct lectures, and with copious illustrations, the principle of *induction* to the teaching of geography, of drawing, and of arithmetic, with a view to shew you at once the use of the principle and the limit which ought to be assigned to it.

But granted the great principles which lie at the foundation of all teaching, we have still to inquire into the manner in which a lesson ought to be given. The character of the teacher, so far forth as it is manifest and *didactic* in the actual lesson,—the sex and nature of the child, its mental and moral constitution, its age, its condition in life,—the object-matter of the lesson, and all the modes by which language should be applied to it, have still to be carefully considered.

We have said that the character of the teacher, so far forth as it is manifest and didactic in the actual

inductive and elliptical methods of teaching, under the same category of method. The art of teaching according to the inductive principle may be a method; but it is method in a peculiar sense, and lies at the foundation of all other methods.

lesson, must be taken into account. Our course, let it be understood, is not upon education generally. We must keep to our prescribed limits. We therefore say that we discuss the moral character of the teacher only in as far as it is manifest in the actual lesson. But that the character of the teacher will teach in the lesson, as well as his formal words upon the subject-matter, we are very sure. He will teach, simultaneously with his technical instruction, earnestness and industry, or indifference and indolence. His very manner will have a charm about it, tending to the formation of character upon a sound and solid basis; or he will betray some subtle insincerity, which must more or less inculcate coarse disguise and shabby affectation upon the learner. Every lesson in reading, writing, arithmetic, or drawing, is also a sermon on patience, on self-government, and self-restraint, far more eloquent than many a long and wearying diatribe of good advice and admonition; or it is just the contrary; -a transient exhibition of power or imbecility, as the case may be: -a mental dissipation to the learner; in one short solemn word, a sin. There can be no spectacle more fatal to the young and easily impressible spirit, than that of a teacher avoiding his duties, or only half performing them. He will too readily learn to imitate the faults of one he is accustomed to venerate and admire. He will have his fallacies and false pretensions. He will also pretend to know what he

knows not. His open-heartedness and simplicity will be scathed and paralysed, as if a blast from the pit of perdition had passed over him. Or, on the other hand, if he sees every lesson marked by grave preparation, calmness, self-reliance, and impartiality, if the teacher comes to him with the subject, to use a common expression, at his fingers' ends, and ready with all his heart to impart it,-petulant, unelastic, and unproductive indeed must be the spirit of that pupil,—barren indeed the ground of his heart,—who does not catch sympathy from such an instructor, and gather from his moral character so exhibited, truth far more valuable and permanent in its effects, than the richest poetry or the deepest science contained in the subject-matter of the lesson.

The importance of the question of moral character, as exhibited in the lesson, will be felt perhaps most strongly, if we consider how necessary it is to the proper play of the faculties of the learner. Without incurring the charge of a belief in the fanaticism of the animal magnetists, we may contend for the truth of animal sympathies. And these soon subtilely extend themselves, through the eye and the voice and the manner and the tones, so as to draw the taught, as it were, by the bands of a man, towards the teacher and his lore, touching every chord of the spirit, and awakening responsive harmonies. And, on the other hand, we may argue that there are such things as deep and immoveable antipathies between

the teacher and the taught, floating miseries in the air, which, like a magician, he as conjured up in an hour of petulance and irreligion, and which now he cannot lay. It may be all very well to say, when a teacher is unpopular, "These are idle fancies in our children." A true instructor, when he suspects that such is his case, will examine his heart, and retire into his closet to pray.

In the next place it will be our duty to consider the intellectual characteristics of the sexes, more especially with a view to examine carefully and impartially the course of instruction proper for an English gentlewomen. What ought this course to be? Is it not, in many senses, as at present pursued, rather adapted to the idea that "a lady is a merely ornamental being," and "that to be useful is necessarily to be vulgar?" Do not our arrangements for the education of our daughters presume too much upon the probability that they are never to be poor? Might there not be much elegant invention furnished to the country; if they were taught, more than at present, the arts of design and modelling? And might not their resources be multiplied, their enjoyments increased, and the practical usefulness of their home-life infinitely augmented; if their science was the science of common things, their arithmetic the calculations strictly proper to the mistress of a family: in short, if studies and inquiries of an economical, that is, etymologically speaking, of a house-managing

kind were interwoven with other employments? Lessons on these points would revive and refresh their buoyant and curious spirits, amidst those higher, and perhaps severer, intellectual studies, which are now expected in female education. They would fill up some of those vacant hours when the busy fancies and affections of the young are most open to temptation, and when, more especially, the delicate sensibilities of women unfold themselves, like the sensitive plant, to every passing impression.

I know not whether it is out of place here, or unsuitable to the proportions of my discourse; but I cannot forbear to present for consideration among you, whether in mathematics those calculations which belong to practical science are not more proper to the female mind, than the higher branches of strict analysis; and, above all, whether a sufficient use is made of nature, with its various, and, I had almost said, feminine beauty, in the course of instruction usually assigned to a girls' school. I have no wish to repress and bury the bright imagination which makes the female mind so fond of poetry and fiction. If I did, it would be too strong for me; it would rise up and assert its power: but I may be allowed to suggest, that even that faculty might be better employed than too often is now the case. Instead of exhausting itself on some dissipating, exciting novel, it might be painting its airy chambers with the scenery of the antediluvian universe; forming

into ever-varying groups the plants and animals of long by-gone eras. That is a healthful and philosophical idea of one of our best female writers, as she is one of our most renowned female teachers. which has led her to incorporate into her course of instruction "a set of lessons on forest trees, designed for the purpose of combining a knowledge of the nature and uses of different British trees, with a habit of observing their different characteristics and beauties; and, if possible, of exciting at the same time a greater taste for admiring their general effect in landscape scenery. These lessons comprise large and rough sketches of the outlines and general characteristics of such trees as are most frequent in our woods; and it has been thought that this method of teaching the rudiments of drawing might be carried out to much greater extent, with considerable benefit to the learner, as regards freedom of outline and power of delineation."

But any inquiry into the intellectual and moral differences, according to which Almiehty Godhas made man male and female, ought to be preceded by one into the constitution of the human mind and heart. In point of fact, no teacher can form a proper idea of method, unless he seriously considers the nature of the being into whom his information is to be cast, and whose powers are to be developed and strengthened, not only by that information, but by the very process of imparting

it. There is, for example, a way of teaching mathematics and history, which, apart from the propositions inculcated in the one study, or the ethical principles enforced by example in the other, will invigorate and enrich the mind; and there are other methods of teaching these two subjects which will tend, apart from the subjects themselves, to impoverish and weaken the mind. There are ways of teaching, again, which may not be, strictly speaking, intellectually faulty, and yet may want the moral charm which is necessary to secure for them ultimate efficiency and success. Hence, it is one of the first duties of a teacher to study mental and moral philosophy, and that with a view to method. The latter investigation will lead him to inquire into the motives according to which men act, to search for the master-key of their moral sentiments and conduct, "the objects at which they commonly aim,-the passions, desires, characters, manners, tastes, which appear in the world around him and in his own constitution." What is that within the breast which makes a child open all its little powers to one teacher and close them all to another? In seeking to be a true and wise teacher, must I not do more than collect a few precepts from books, or depend upon my own casual observation of certain temperaments and the play of passion within them? Ought I not diligently to explore what pleases and what pains, what amuses or annoys, what appeases or ruffles, what attracts or alienates, what inspires with hope or dejects with fear such a being as man is? Must I not habitually, and with all the philosophical precision of which I am master, inquire into the natural principles of moral truth? The ethics of the teacher! what a boundless field for speculation does the idea unfold!

In extending his inquiries to the phenomena of the mental powers, not forgetting that they are always combined in action with the feelings, the teacher finds himself encircled with almost infinite materials for interesting and valuable research. Here indeed, if anywhere, must be expect to find the master-key of all method. Let us suppose, for example, that he has been investigating the reasoning faculty. Would he not be naturally led from that study to infer that education must, in a great measure, follow the analogy of a strict course of logic, inductively framed, and that clearness of apprehension is the first thing to be cultivated in the young, because in them the perceptive faculties are most active and strong? How many methods would, then, suggest themselves. The lessons on objects, and simple experiments in natural philosophy, now so often and so beneficially employed to vary the studies of young children, are but the result of this train of reflection. And it is equally applicable to a strict course of language. It suggests to us the importance of using the eye in cultivating the perceptive faculties, and introduces the black board or the large slate into the school-room. I remember once to have seen a Dutch elementary teacher drawing on a black board, of no mean dimensions, an enormous A, before a very young class of children, and the shape of that letter seemed to grow familiar to them, as it sprang into being beneath his hand. The same observation is applicable to Mulhauser's method of writing, as adapted to schools where many children have only one master.

We have not now time to develope this view and to shew its relation to the higher branches of intellectual education. And we must leave to future opportunities the curious and pregnant questions,-How must the teacher bend the will of his pupil, so that his reasoning faculties may not be thwarted or overborne by that mysterious power within him? Again, How ought we to discuss, in the language of mental philosophy, and with a view to the formation of true methods, the nature of a quick child, a sensible child, and a slow child? What is meant by the association or relative suggestion of ideas; and how would a teacher employ that association in imparting knowledge, and fixing it upon the minds of young persons, thus to be distinguished in their temperament?

While investigating the association of ideas, the inquirer naturally turns to consider the memory,that strange, uncompounded, original faculty, which has so close a connexion with our present duties and happiness, and may be one of the witnesses summoned at the last day, or one of the books opened to vindicate our final doom. A diligent and thoughtful instructor will find himself surrounded by thickcoming methods, directly he begins to study the nature and office of the human memory. What pains he will take to be vivid and picturesque in his teaching! With what spells will he summon the imagination to his aid, and invoke all her attendant influences! In teaching geography, you will find him quoting the verses of the poet, or the descriptions from actual survey, of some picturesque traveller. Knowing, again, that the idea of anything produces the idea of a like thing, and that it may be easily brought to produce that of its contrary, such a teacher will strengthen the memory by generalization and the association of ideas. This may be called the method of comparison, not to say of analogy. In geography, he will tell us that Edinburgh is the modern Athens; that Amsterdam is the northern Venice; and that Bagdad, under the caliphate, has been denominated the Rome, the Athens, and the Alexandria of the East. Again, he will inquire into the relative value of the method called memoria technica. And many valuable, but subordinate, questions will suggest themselves: for example, Is the effort to remember synchronisms, or one date by another, more allied to abstraction

or to the association of ideas? How does this principle of abstraction assist us in learning the art of rapid and accurate questioning? How would you avoid the danger of becoming desultory in teaching, while you were thus endeavouring to strengthen the memory and to furnish it with materials? while you are traversing the field of illustration and analogy, how are you to keep the mind of the learner concentrated on the main points of the lesson? What is the difference between the mere power of comparison, and the more comprehensive power of illustration? In what way ought catechisms, involving doctrinal statements, to be first taught to children? Why would you avoid broken catechisms? Which are the more simple to a tolerably intelligent child, the glosses of an instructor or the words of the church catechism? In what way ought the simple, uncompounded memory of man to be employed in the study of technical catechisms; and how will an accurate knowledge of technical words lead to an accurate knowledge of things?

While suggesting in outline these and other questions, which will more or less claim our attention, concerning the office of the memory and the limitations of that office, we cannot too strongly and pointedly urge upon you to avoid the defects of that teaching which leaves children to educate themselves, by merely setting them lessons to be learned by rote. Long pages of barren names on geography did I

commit to memory when a boy at school, which, having no foundation in my understanding, no aid from my imagination, have long perished from my mind, like so many houses built upon the sand. One of the great temptations which beset the instructor is that of intellectual indolence, or at least such a sense of fatigue and exhaustion as is nearly akin to it. In such moments, when indisposed to teach,-when speaking what we know well seems a trouble not to be endured,—when we wonder at the hopeless ignorance of our young charge, and that they do not seize, by rapid intuition, what we have perhaps slowly acquired, there is no method so plausible to our minds, as that which sends them to their places to learn a lesson. It may be useful and wise to test, and to strengthen by testing, the memory of the young; but long paragraphs to be learned by rote are far more frequently given to save the labour of the teacher, than after a calm and philosophical consideration of the value and suitableness of the lesson so to be committed to memory by the child. It may be replied, in answer to these remarks, Do you not seek too much to save the learner trouble? Is there not a moral discipline, an imitation of the dealings of God's providence in the great living world around us, in this exercise of the memory? Does it not inculcate the lesson of self-reliance and personal industry? Will it not help your pupils forward in the beginnings of a career of conscious

energy? We reply, That the example of a teacher avoiding the labour of teaching is as likely to injure the morals of a child, as the necessity for personal exertion, taught in that form, is on the whole likely to strengthen and inform his mind. Whatever mental perplexities are felt by the instructed, will be met by sympathetic exertion on the part of a true teacher; and thus there will grow between them both a constant action and reaction of most beneficial effort. On the other hand, languor and indifference are as contagious in the school-room, as the most rapid epidemic in an ill-ventilated neighbourhood. And if the teacher, having generally the stronger will, once lets that languor get the better of him, we may venture to surmise that his scholars will copy and exaggerate his example.

We might indulge ourselves in reflections upon other questions pertaining to the application of mental philosophy to the science of method. Much more, for example, might be said about the influence of the imagination on the memory, about its connexion with the sensibility or the faculty of receiving impressions, and, above all, about the manner in which the action of all the other mental powers ought to be made subservient to the cultivation of the reasoning faculty, as the faculty which most indicates our humanity. But now another important question demands the preference of our attention. And that is, the application of the whole subject to infancy

and youth. For we shall not be prepared to discharge our duty as teachers, until we have diligently inquired into the character, tendencies, and habits of childhood. Man must be our study throughout his whole progress, from infancy to maturity. peculiar enjoyment of the senses which belongs to children,—that strange sense of property and of selflove,---of personal dignity and importance,---of boundless pity and benevolence towards others, -that faculty of imitation and mimicry,-and, above all, that most touching belief which they manifest in all we say, as though scepticism were an acquired habit, rather than an original taint of human nature,-all these subjects will merit the constant regard of a true teacher. But, while he considers these points in their relation to method, he will find fertile subjects for discussion: -How would you describe a child of six years old, as to his bodily and mental constitution? What differences would you make in your description, if he had arrived at the age of nine? he were now a youth of twelve or fifteen years? How would a skilful teacher curb or regulate the restlessness of a very young scholar? Would it be right entirely to repress it? Again, What faculties of a child's mind are first developed? Have you . ever thought of constructing a course of elementary instruction, both in science and language, to harmonize with the progressive development of the faculties from the age of six to twelve years? Have

you ever studied different maps, books, apparatus, &c., so as to judge for yourself what editions of standard works, what elementary manuals, what atlases, globes, boxes of instruments, materials for drawing, design, and so forth, were BEST for your purpose? I do not now mean best absolutely, but best relatively to you, because you believed, so to speak, in their adaption to your course, so thought out and decided upon? Has the same inquiry led you to construct, for your own consideration and improvement, a routine or time-table, in which you endeavoured so to arrange your subjects of study and the other occupations of your pupils, as to produce in the result a wise and good man?

For you must observe, that our inquiry is not only into the mental and moral characteristics of human nature, but into the condition and habits of childhood. A most subtle, but spirit-stirring inquiry, that; spirit-stirring on account of its very subtility: for it is not with mute and unconscious materials that you have to do, still and pliable under the hand of the artificer; but with phenomena, the forms of which are constantly changing. You can only secure your results by constant study, constant watch-Before every elementary teacher of boys. fulness. I, for one, would ever set the image of a small boy. -one not very remarkable for talent or moral earnestness, but an average, common-place boy. Study that boy; try and learn why, after you have advised

[Q. C. LEC.]

him in a thousand forms, and urged on him what is right and true by a thousand motives, he still falls into sin, neglects his duties, and dishonours himself and God. The same earnest admonition belongs to every class of female teachers. Follow, through all its rich and wonderful phases, the character of bright, not to say unsullied, girlhood. Observe what principles are most manifestly developed in female behaviour; how they are connected together, and how they are modified by circumstances. See, as Aristotle would call it, how she does her work; and like a skilful physician, aiding Nature in her efforts, help her to execute that work well. The reason of the failure of many plausible systems of education may be referred to the fact, that the inventors have apparently framed them without due consideration, not to say in utter forgetfulness, of the nature of the being on whom they were to be brought to bear. Descartes, who hung a world upon hypothesis, these writers have suspended the whole development of the human mind and heart upon some arbitrary and partial maxim, which coerced some faculties, which overlooked others, and which, therefore, interfered with the proper play and proportion of all.

Let me add, that this constant study of the whole body, soul, and spirit of childhood,—for under those three heads you may class the whole of education, and to the defective or redundant education of one or the other you may refer the whole of its failure

in the world,—will give you the practical habit of teaching wisely and well. Your questions and ellipses, and other artificial methods, will come almost naturally, if you are a constant and diligent student of childhood and youth. At the same time, our course would not be complete without a regular discussion of these methods. We must hereafter speak of all the modes of catechizing, of class and individual teaching, of gallery lessons, of school discipline, and, above all, of rewards and punishments: while we shall finally add to our course, a retrospective review of the literature of education, and an inquiry into the relative merits of various kinds of school-books and apparatus. Large promises, you will say. May Almighty God help us to fulfil them!

Let me now, in conclusion, invite your full and ardent co-operation in our course. I shall call upon you, when our numbers are diminished to those who take a practical and permanent interest in the subject, if not to interrupt me in my readings, at least to question me freely at the close of each Lecture. We may then hope that you will eventually carry away to your respective scenes of labour, not a mere barren word-knowledge of this great question, but a living and real appreciation of it. The children entrusted to your care will be daily to you the interpreters and expounders of the philosophy we have learned together. And we may hope that your school-rooms,

244 ON THE METHOD OF TEACHING.

instead of wearing a dark and cheerless aspect, as scenes of drudgery and listlessness, will grow bright and cheerful; at once the laboratories for glorious experiments, and the theatres for the training of immortal spirits.

XII.

ON THEOLOGY.

BY THE

REV. FREDERICK DENISON MAURICE, M.A.

CHAPLAIN OF LINCOLN'S INN.

TN a Lecture upon the purpose and plans of this L College generally, which I delivered about a month ago, I explained briefly how we proposed to treat the particular subject of Theology. I hoped then that the introductory Lecture upon that subject would be delivered by Mr Trench, and that I should take only a secondary part in the management of the It has happened, very unfortunately for the College and for me, that during the present Session those whom I was to have assisted will be otherwise occupied, and I must be responsible for all the teaching in this department. A more satisfactory arrangement will, I trust, be made before we begin again in October; in the meantime, I must endeavour to give you some notion of the Course upon which I propose to enter, if there should be any pupils to enter it with me. As I am now speaking only for myself, I have the less scruple in taking the hints in the former Lecture as the foundation of the present.

What I said, was in substance this: that we

chose the word Theology to describe the subject of this Course, and not the word Religion, because the latter points rather to a habit of our own minds, one which is necessary to us at all times and in all studies, one which all studies, rightly pursued, tend to cultivate. Theology has a distinct, definite ground; if it has any meaning at all, it speaks of One whose existence is altogether independent of our feelings and habits of mind, however much they may be connected with our recognition of His existence. Theology has its own fixed and distinct object, as human studies have their distinct object; as the physical Sciences have their distinct object. There may be, there must be, however, the closest connexion between all three; and it is of great importance to discover what the point of connexion is. Theology a more close relation to those studies which concern nature, or to those which concern man? held that it had the closest relation to those which concern man. History was the study which I believed was most directly allied with it. This I maintained is the principle upon which the Bible proceeds. It affirms God to have revealed Himself to us through History; it assumes the connexion of God with man to be altogether different from that of God with nature; far more intimate, the connexion of a Creator with one whom He has formed in his image, of a Father with a child. Starting from this point of view, I said that we should take the Bible as the

orderly exhibition of the different steps of God's revelation of Himself-a revelation which includes and involves a revelation of the position of human beings, their relation to each other and to the world around them. I said we should not argue in defence of the authority of the Bible, or enter upon a confutation-except merely by accident-of any arguments that may have been brought against it. If it cannot make out its own claim of authority by the light it throws upon our minds and upon the surrounding history, it is not the book which I take it to be. To this task then we should chiefly devote ourselves; the task of tracing out the course of Scripture History. We might pass on hereafter, from the commencement of Church History which we have in the New Testament, to the later periods of it; but we should not, under any circumstances, forsake the historical method, for the sake of introducing what is sometimes called a Course of systematic Divinity.

I. It will very probably strike some who have listened to this statement now or heretofore, that we cannot act upon it without making some important omissions. The first and obvious question will be,—Upon this plan, what will you do with Natural Theology? You begin with the Bible; you start from the book of Revelation. All the knowledge which men in other days obtained from the study of the works of God, from that most wonderful work

the human form and structure, you pass by; nothing is of value but that which you find in Scripture.

If this charge were true, it would indeed be a very serious one; I hope to shew you that it is altogether inapplicable to what I have said. I do not, indeed, pretend that I can adopt the nomenclature which was so common in the last century, and has passed into this. I do not feel able to speak of Natural and Revealed Religion, or Theology, meaning by the former that Religion or Theology which is contained in the world around us; and by the latter, that which is contained in the Scriptures. This distinction, it seems to me, is set at nought by History, by our own consciences, and by the Bible itself. Nothing is more clear than this fact: that the heathers received Nature or the outward world as a revelation. They believed that invisible powers were manifesting themselves, or that the Invisible Power was manifesting Himself, in the They did not and could not forms of nature. separate Nature from Revelation. They could not suppose that they were merely finding out evidences of a Divinity in the world; they felt that, in some way or other, He must be speaking to them in it. All Mythology witnesses that man is not meant to create the objects of his own worship, even though it is the strange record of his efforts to create them: it looks upon all existing things as bearing marks and vestiges of a Divine presence, while it turns that truth into an excuse for identifying the presence with

the things. If then I am asked to acknowledge that all people, however little they know of the Bible, may have had a Religion or a Theology, I acknowledge it instantly; if I am told that this Religion or Theology had very much to do with the stars, the Earth, the seasons, the phenomena of Nature, and its regular course, I say, Nothing is more certain; if I am told that these different thoughts of men are worthy of the deepest study, I have not the slightest wish to dissent. And if, further, any one likes to call this Religion or Theology Natural, though I think the phrase is not perhaps the best, or at least requires some further explanations, I should yet not strongly object. But if it is said that there was no revelation contained or implied in this Theology, I should consider the very facts to which I have alluded, as all leading to the opposite conclusion.

Perhaps, however, it will be said that Natural Theology is rather the sum of our conclusions from Nature respecting God, than of those which were made by heathens. Be it so; I am quite willing to rest the case upon an appeal to the heart and conscience either of civilized people or savages, either of Christians or Pagans. Is it some elaborate proofs of design which you have seen drawn out in learned and ingenious books, which constitute the impression you derive from the visible world and all its order and beauty? We may fancy it is, but we do our-

selves grievous wrong; we do wrong to the tens and hundreds of thousands upon whom those proofs must be utterly lost; we do wrong even to the expositor himself, who must mean that the force of the evidence lies not in his writings, but in the things of which he writes. They speak a much more direct language; a language for all simple hearts that are opened to hear it. And those simple men receive the testimony as a revelation—the revelation not of a mere designer or fabricator of a world, but of a gracious Being, who, through that which is most calm, peaceful, and harmonious, as well as through the whirlwind and lightnings, is declaring to them something of himself. It would be a shock to their consciences, if you told them that they were working out a proof of the existence of a Supreme Being through Nature; that through Nature He was not shewing them of His existence, and much more than His existence.

Those who attach profound weight to the authority of the Bible, must be still more revolted by such a notion. For St Paul tells them expressly, in the first chapter of the Epistle to the Romans, "That which may be known of God is manifest in them, for God hath shewed or revealed it to them. For the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are visible, even His eternal power and goodness." And the Psalmist had

said long before, "There is no speech nor language where their voice is not heard."

These passages are an answer to the notion that we teach the Bible, because we suppose all that is worth knowing lies in its letters. Bible will not let us think any such blasphemy. It does not speak of itself. It speaks of God. speaks of the ways-all the ways in which He has It explains the revelation in revealed Himself. Nature and its limitation. It explains how that revelation was perverted. It explains the revelation to the human conscience and heart. It explains the revelation through family society, through national society, through the universal society of the Church; it interprets the actual relations of God to man, those which are not of to-day, nor of yesterday, but are eternal. It interprets them in connexion with the past, the present, the future. Therefore do we make it our one text-book, not that we may limit Theology more, but that we may break down the limits within which our narrow and artificial notions and arbitrary divisions have confined it; that we may understand better how it is related to all our thoughts, feelings, and studies. Which understanding will tend, I believe, very greatly to remove the fears and suspicions that some people have, lest physical or human science should in some way undermine Divine principles, and may make us ashamed of having supposed that one truth could be injurious to another.

I may be asked how it will be possible to connect the teaching of Morality or Ethics with Theology, if we treat it merely in the historical method. Shall we not find acts tolerated at one time, which would be sinful at another? Must not fixed rules and maxims be deduced from the Bible, and formed into a separate system, if we would get the full result of its teaching? The answer to this question has been given already. The very word Revelation contains it. The unveiling is not instantaneous, but gradual. The Bible I have taken as a history of the steps. The revelation is to a creature formed in the Divine image, who reflects that image so far as he sees it, and no further. If we keep this thought in mind while we are reading the Scriptures, we shall, I believe, have a key to most of the moral difficulties (I do not say to all-at least I do not say that we can apply the key to all) which are suggested to us by the acts spoken of in Scripture, as permitted in one age, evil in another. And thus we rise above maxims and rules to the first principles of morality. We find them in the Eternal mind and character; the real ground and centre of all good, from which all good is derived; in the knowledge and love of which all spiritual creatures trust to find their good. But whilst this highest and most perfect morality is preserved throughout Scripture and is fully brought out at the close of it; the full play of life and death, the exhibition of the struggle of the

good and ill in each particular character, the perfect fairness of the representation, the certainty that we are reading of beings of our own flesh and blood, and that their temptations are ours and their means of deliverance ours: this seems to me worth all moral inferences and dogmas, supposing them to have been delivered by a voice directly from heaven. I cannot find any method of studying Ethics at all comparable You have that fixed which to this historical one. needs to be fixed, and that in flux which should be in flux. You are continually reminded of the danger and ungodliness of making the maxims and notions of your own times into principles and standards; you are reminded that this is wrong, precisely because there is an eternal, immutable standard which is seeking to mould you into conformity with itself.

I have made these remarks the rather, because I have been asked why we have not made Ethics a regular part of our College Course. Perhaps we should have been right in doing so, perhaps we may do it hereafter; but I own my inclination is to treat all such subjects in as practical a method as we can; for that I believe is the most scientific method. I should not like to see the subject of Morals, in a College of Ladies, dealt with technically and systematically; separated from life and History. I do not say that it must be so treated, if it is not taken in connexion with Theology; but I believe the peril to both is lessened, when they are studied

together, and when the Bible is regarded as the guide to both.

I should not hesitate to make nearly the same remark respecting Metaphysics. In that department, the risk of getting mere crude heaps of opinion. instead of realities, is greater than I think most persons are aware. Yet I will venture to affirm, that there is not one great metaphysical problem, which is not brought before us in Scripture under one aspect or other; under such aspects as make us feel that it is not a book-problem, but a life-problem; which every ploughman must in some way find the solution of; which every child is perplexed with; which lies about our every-day path. To understand Metaphysics thus is to understand them in the highest way: and I would earnestly beseech men, as well as women, not to take as a substitute for such knowledge, a wearisome collection of phrases and formulas and names of sects, which destroy the imagination and crush the heart; which keep us in a perpetual middle region of fog and mist, incapable of seeing one object clearly on earth, and yet not rising the least nearer to heaven.

III. I may seem to have been preparing the way by these remarks, for the third objection to our method which is likely to suggest itself. I mean, that while seeming to study Theology, we shall be evading the great theological doctrines which may indeed be scattered through the Bible, but are concentrated in the

Church symbols and in books of divines. These two classes of writings are often put together; but if by Church symbols are meant our common Creeds, I do. not think there can be any more unlike. These Creeds are specially personal and childlike; the divine Object is kept before us throughout, and the person who puts faith in that Object; he will value these documents most, who follows the historical method of the Bible most carefully. Looking upon that history as a revelation of the divine Name and of the relations in which God stands to man, he will look upon these as a beautiful gathering up of the results of the revelation. He will eagerly fly to them as a protection against those who would cast Theology into moulds, and would empty it of all its living qualities. But any person who is afraid to follow out the windings of the Divine record, who likes it very well in its way, but complains that he cannot make a system out of it, and is only contented when by some legerdemain he has contrived to force it into some other shape than its natural one-such a person does not love the Creeds for this reason, but for quite a different one; he loves them because he has read himself and his own artificial thoughts into them; because he has made them into documents, which are not fit for child and aged people, for the prince and the beggar, for the wayfaring man and the scholar. Every doctrine which has been a solace to the poor, or strength to the martyr, which explains

how men are united to God and to each other: which teaches how sin has been overcome for all, and may be overcome in each; which sets forth the mystery of the divine Name, will assuredly come forth, not in some detached text or difficult inference, but as a part of the revelation, or as its ground, or as its consummation. Coming forth in this way, its form must be very unlike that which it takes when it has been cut and squared to fit into the scheme of some earthly doctor; or when it has suffered alternate enlargements and mutilations from angry controversialists; or when it has become the palladium of some party; or when priest and people, each ruling and serving the other, have made it into a mere instrument, and reduced it to their own moral standard.

IV. Once more. You will perhaps think that I am doing very wrong, in avowing plainly at the outset of these Lectures, that I did not mean to teach what are called Evidences of Christianity, or to refute the objections of infidels. Are not those evidences more disputed now than ever? are not these objections more rife than ever? Is it right, is it safe, in a London College of all places, to take no notice of them? I answer, solemnly and considerately, If I wanted reasons for the course I have adopted, those which are produced against it will be sufficient. These evidences are disputed, these objections are rife; do not teach your daughters to trust in the one, still

less to exercise any argumentative skill, they may have acquired here or elsewhere, upon the other. should be distinctly understood that there is nothing at all sacred to us in our best books of evidence: they may all be overturned, and the facts of the Universe and of the Bible will stand just where they did. But there is a very great danger in our fancying, or leading our children to fancy, that we have a set of authorised, approved arguments, which are producible at all times, and which will serve for the objection of to-day just as well as for the objection of yesterday. There is danger, because when those arguments are produced and the opponent does not seem discomfited, but, on the contrary, affirms that they do not touch him in the least; that his difficulties are of a kind which the accomplished teachers of the last age were unacquainted with; there is a sense of exceeding disappointment and dismay in the mind of the defender of Christianity, which it requires some stronger help than any books or human teachers to remove. But the danger is greater still from within, to any one who has been relying on these defences. There is nothing to live upon in a theory about the inspiration and authority of the Bible. Such theories have themselves no inspiration or authority; how miserable then a thing is it, to substitute them for the very book which they declare to be one of infinite power and life! Why not leave the theories, and study the book? That will be found to have

[Q. C. LEC.]

substance in it; the minds and hearts which are nourished upon it, are substantial. At first, indeed, it may seem to those who study the controversies of this day, as if we required, more than in any time, to consider and assert the claims of the Bible to be a book from God. Nay, as if we needed to go even further back; to take more pains than our fathers took, in asserting the being of God. It is perfectly true that the great difficulty in our times is to admit the idea of a revelation; that this difficulty has its ground in a deeper and more awful doubt, whether all that is divine has not its root in our own religious instincts; whether man is able really to ascend above himself. But the more practically we are conversant with these difficulties, the more earnestly we have sympathised with those who are tormented by them, the more we have traced them in our own hearts; the more we shall find, that if you would persuade any one of a revelation, you must bring out before him that which you believe to be the revelation; if you would persuade him that God is, you must not be afraid to declare, with meekness and fear, in what way you have been taught that He has declared Himself. The most sceptical people will recognise a reality in this mode of speaking, which they complain is altogether wanting in the other. They feel that you are not trying to make out a case, but are asserting a conviction—that you are not a special pleader for Christianity, but a Christian. The difference of the effect

is altogether inconceivable, and you will see that it must be so. If we are honest in our profession of believing in a revelation, we must suppose that it is addressed to human beings; that they need it; and that they have consciences and hearts which are created to receive it; surely then we are safer in speaking directly to these, than in taking a long roundabout course to convince their understandings that they ought to be convinced; to shew them why they should bow to that, which we believe has a greater power in it to make them bow, than anything else has.

I feel this point very strongly, and, I may add, especially in connexion with this Institution, and with those whom I am now addressing. The religious influence of your sex upon ours is something quite immeasurable; the responsibility for the exercise of it, I must remind you, is very great; I am bound for our sakes to speak honestly what I know, or think I know, about that which may weaken or strengthen it. That it lies chiefly in life, we all are aware; words are effectual, so far as they are part of the life, and express it. I should hold it therefore to be a sin against my own sex if I helped to supply you with arguments which are dry, hungry, dead things, which one cares for less the more one has had to do with them, instead of leading you to words which I believe contain life and kindle it. But I hope I should never act upon so self-interested a calculation, if I did not in my conscience believe, that in this way I should be shewing you the way to the soundest and the deepest knowledge; knowledge which confers the greatest clearness upon the faculties which are exercised in receiving it. I do not pass by evidences because I wish to evade any real perplexities which you may be suffering from, but precisely because it seems to me that these evidences evade them; that they do not meet us where we want to be met, and that the Bible itself does that effectually, which they fail to do.

You will perceive, that in taking this course I am but claiming for Theology the same position which my Colleagues claim for their different sciences. They at once enter manfully upon their teaching, without a long preliminary proof that they have something to teach. The natural philosopher, and the musician, and the mathematician, begin with no evidences. Those truths which they have to communicate are the evidences; as they present them in one form or another to your minds, they are confident that they will carry their own light with Is it not a mockery to teach Theology if we have not the same faith? If we do not think God has actually spoken to men, why spend our time in shewing that it is possible he may have spoken; if we do think so, why not set forth the speech itself?

The kind of evidence which I hope will commend itself to the minds of my pupils, is this. They will

learn, I trust, to look at the Bible in its simplest form, without any elaborate expositions, or ingenious inferences, as containing the history of the Divine government and education of our race. It will give them a view of the growth of human thought and of human society, which I think explain wonderfully both the facts we meet with elsewhere and the elaborate theories respecting them, which seem to stand out in fierce opposition to each other. It is busy with all common things, with the transactions of daily life; in them, not apart from them, men learn that they are mysterious beings. How God awakens the discovery, how he guides those to whom He has made it, the book declares in the clearest and simplest language-language, however, which would not be plain to us, if there were not the like process going on in ourselves. We ask for an interpretation of it, and we are puzzled, so many are offered; they are so contradictory, each is so much more difficult than the thing to be interpreted. We ask it to interpret what we see and feel, and the different partial notions respecting itself; gradually a light dawns upon us; we feel that it is from above, because the ground at our feet is made clear by it; we feel that it proceeds from that Life which is the light of men.

I do not conceal my belief, that if Theology has a place among studies, it has the chief; it is not a science; it is the science. But I am not the least anxious to urge this claim on its behalf: first,

because it must be made good—if it is a true oneby trial, not by assertion; secondly, because the nature of it may be mistaken. There have been some who have supposed that the Bible, like the Koran, either comprehends all books, or is a substitute for them; that Theology either takes in all sciences, or extinguishes them. Both these opinions I hold to be mischievous and detestable. If the Bible is made the one book which sets aside all others, it soon ceases to be regarded as the book of Him who created the universe, and from whom all the thoughts and wisdom of all creatures come. becomes not the utterance of His mind, but an idol to which we offer the homage which is due to Him only. If Theology extinguishes all other sciences, it soon extinguishes itself; it becomes a system, its reality is gone. The day we look forward to is that in which every insect and flower, every order of Creation from the lowest upwards, shall be seen in its perfect distinctness, in its fulness of life, in its perfect relation to every other; because He will be fully revealed who called them into existence, who renews their life day by day, in whom they find their purpose and their harmony.

By these tedious explanations I have cleared the way for a very simple statement. I should wish the pupils to come to the class with their Bibles. I propose to begin at the beginning. I cannot exactly say how long we may dwell upon any particular book; but I should wish it not to be so long as that the pupils should be in danger of losing the sense of connexion between its different parts or between that and the next. I shall very rarely stop to illustrate particular texts; only when the understanding of them is quite necessary to the course of the history. I shall not introduce catechetical instruction at first, as it may be disagreeable to some pupils; gradually I hope it may be adopted. From time to time, I may request written accounts of the Lectures, or answers to written questions. I will only add, that as every teacher is at liberty to lay down what rules he pleases for his own lecture-room, and as every teacher is bound to use those methods which he believes are needful for the right study of his subject, I shall open the Class each day by saying the Lord's Prayer.

XIII.

ON

VOCAL MUSIC.

BY

JOHN HULLAH,

PROFESSOR OF VOCAL MUSIC IN KING'S COLLEGE.

POLLOWING the example of my Colleagues, I appear before you for the purpose of presenting a brief sketch of the course of Lectures which it will be my duty to commence shortly in this place; and also, that I may state (so far as the limits of a session of this kind will admit) what objects, in any way different from those common to every similar course, will be sought in them.

On the subject of musical instruction, it has fallen to my lot of late years to write and to say a good deal: and if, in most cases, I have thought it well to leave what are called the "humanizing influences" of Music where I found them, you will easily anticipate that I do not intend to alter my course to-day. It would be idle, indeed, to advocate the claims of an art in an Institution founded for the

education of that sex upon whom, in England, its cultivation has heretofore almost exclusively fallen. But in respect to Music as an element of educationin respect to the best means of arriving at any given result, or the value of those means, apart from the consideration of any result whatever-the time has by no means yet arrived when anything can be taken for granted. The estimation in which the art is held, is no doubt very different from that of ten, or even of five years ago; but, I repeat, as an element of education, it has by no means attained the place to which I hope it will one day be thought entitled. Hundreds have essayed the study of Music who till very lately had never given it a thought-would scarcely have considered it a rational pursuit; and thousands are now under instruction, who would once have had no means of getting within the sphere of its influence. But, strange to say, among that particular class who were once the only music studentsfemales of the upper and middle ranks of society-Music (as far as my means of observation allow me to judge) has not made any progress whatever. Amateur singing and amateur playing, in "good society," are very nearly what they were ten years ago; or, to speak more plainly, musical parties still continue to present a great deal of very indifferent music, very indifferently performed, to audiences more indifferent (in another sense) than either the music or the performance. The progress made in

English music has been rather in the way of creation than of improvement. Many, who till lately knew nothing about it, could do nothing in it, now know and can do a good deal; but the great bulk of those who once stood alone in the power of doing a little, still continue to do a little, and that little very badly. It seems not unlikely, that in a few years footmen and chambermaids will make better music than their masters and mistresses, and that the "famous men, such as found out musical tunes," will obtain in the kitchen an appreciation which is denied them in the drawing-room. And yet, without doubt, as much time as ever is given to the study of Music by the higher classes, and "accomplishments"—music more than all others—are put forward, as often as ever, as the scape-goats of ignorance and frivolity.

As an element of education, Music has not yet had fair play, at least among the higher classes of modern English society. The objects sought in its study have not been worthy objects, nor perhaps have the best means been taken to attain even them. For, has it been from an honest desire to promote social recreation? Has it been with a view to opening new worlds of thought in the cultivation of a new language, that young ladies have for the most part been put to the study of Music?—No: but because, more often than any other accomplishment, Music affords opportunity for exhibition and individual display. I do not for a moment mean to imply,

that in the exhibition of musical or any other talent, there is of necessity the slightest impropriety, or that individual display is necessarily accompanied by the slightest sacrifice of true delicacy or modest feeling; no knowledge, no skill, no thought even, can be manifested without exhibition of some kind or other: expression is a condition of their usefulness, almost of their existence. All I would contend is, that Art cannot be sincerely and beneficially pursued, while exhibition is cherished as the end, instead of being tolerated as a means-

I have said that musical parties present a great deal of indifferent music, indifferently performed. Perhaps I should have better put these two assertions into one, by saying that musical parties present a great deal of very unfit music. The labour of amateur musicians is often grievously misdirected. They are for ever attempting to do at their leisure, what can only be done successfully when made the business of a life. Let a pianoforte player make his appearance, whose hand can grasp a "twelfth" or whose fingers will "turn inside-out like a glove," every school-piano groans—every school-girl groans too-under his compositions. Let a singer come forth with a compass, flexibility, and sustaining power, such as are combined in perhaps not a dozen individuals in a century (these qualities being developed by years of exclusive painstaking), every musical

circle is tormented with an interpretation of his or her songs, in which nothing is wanting but the compass, flexibility, and power, which they were written for the express purpose of displaying.

One of the first evidences of reformation in amateur music, would be the study and presentation of compositions having an interest and a beauty of their own, independent of any which they owe to the executive skill of those who perform them. For, though very difficult music is sometimes very fine music, it by no means follows that fine music is always difficult. On the contrary, a vast number of musical compositions of the very highest order of invention and science, though susceptible of increased effect from the exercise upon them of increased skill, still demand positively for their execution but little. And this, though extensively true as respects instrumental music, is almost universally true as respects vocal music. No extravagant amount of power or flexibility is required for the interpretation of the finest songs of Handel's Oratorios, or even, with some especial exceptions, of Mozart's Operas. And in respect of choral or concerted music, there is no voice, however small in compass or deficient in flexibility or power, which may not be turned to some account in it.

The idea of a necessary connexion between music and musical execution prevails so extensively, and

has operated so actively and for so long a time, on musical studies, that few persons are able to think of the one without the other. A musical work and a musical performance are, in their minds, relative terms*. Assuredly, the performance cannot exist without the work; but the converse of the proposition is not necessarily true. The ear is only one of the senses through which the mind can receive pleasure from music; and though its exercise is indispensable to those who have not studied the science, such is by no means the case in respect of those who have. On the contrary, for the musician the eye does more than the ear: and the most intimate acquaintance with works of which they have never heard a note, is, among musicians, as common as possible. Perhaps, however, the greatest amount of musical study is carried on by a joint use of the two senses, the eye and the ear; for a perfectly fair

• In the columns of yesterday's *Times* will be found an odd illustration of this confounding of music and musical performance, in the form of an advertisement of a Concert to be given by a Society which professes to take upon itself the honourable office of preserving from oblivion the works of illustrious composers of past ages. This advertisement, which is of some length, is exclusively occupied by a list of names of *singers* who are to perform at this concert;—concerning the *music* they are to sing, there is not a syllable. Our continental neighbours with some justice express their estimate of the state of Music in England, by saying that the audiences of our Italian Opera House are the best judges in the world of *singing*, and the worst, of *music*.

estimate of a work may be formed by a musician with the music before him, from a performance which to an uninitiated hearer would be absolutely unmeaning and unintelligible.

Indeed, as respects the enjoyment of fine music at all by those who have taken no pains to understand it, I must confess myself a little incredulous. It is not to be denied that many persons in such condition exhibit considerable pleasure in musical performance, and show some taste and judgment in regard to mere execution, especially singing. But as to the music itselfthe everlasting thought to which the artist gives a momentary expression—their pleasure is the pleasure rather of the glutton than of the epicure. Such people swallow every thing. All is fish that comes to their net. There is no measure, no discrimination, in their applause. They have the same superlatives for the pipe of Pan as for the lyre of Apollo. dance of Auber, or a symphony of Beethoven; a ballad from The Quaker, or a chorus from Israel in Equpt: a Gregorian chant, or a motet of Palestrina: all these things not only afford them some pleasure, as undoubtedly they all should do, so long as they are all well performed; but they afford them equal pleasure. Like the curiosity-dealer of the Satirist, they have "the same raptures at the service of a riband as of a Raphael."

The good influences of Art must continue to be as inoperative as ever, without some critical power on the part of all upon whom it is sought to bring them to bear. Cultivation is needed as much for those who hear, as for those who sing or play; not cultivation in the same degree perhaps, but of the same kind. Music is an art as well as a science, and I know of no way of attaining any knowledge, beyond a few bald and isolated facts about the latter, without some exercise in the former. The power of hearing (perhaps also of seeing) judgingly, is inseparable from some power of doing; and one of not the smallest motives for spreading musical education is, not more to increase the number of executants, than that audiences fit and no longer few should be found for those who have a new truth to deliver, or a new phase of beauty to present to us.

Any considerable reformation of the manner in which music is generally enjoyed, must be preceded by reformation of the manner in which the elements of it are generally studied. I do not mean by further simplification of methods of instruction; for perhaps as much has been done in this way as is at present possible. Simplification has limits. The mountain-path may be graduated and freed from some obstructions; but so long as our goal is the mountain-top, our progress must be laborious, if not difficult. There is a law of gravitation for mind as for matter; and neither intellectual nor physical ascents can be made without toil. Nor can I think, were it even possible to find it, that a

perfectly smooth pathway—a "royal road" as it has been called—would be at all the most useful and agreeable for our journey. In travelling we often seek pleasure or profit, not so much in the place to which we are bound, as in the effort and exercise necessary to take us there.

The estimation of means, over and above, or irrespective of results, is perhaps the characteristic of a good English education. The training of an English gentleman is certainly not in those things, for the use of which in after-life he is likely to have much call. Those who have a cui bono for every elegant pursuit, those who expect a quick return for the investment of every hour, should be reminded that a large proportion of every generation of the most practical people on earth, have spent threefourths of their youth in the study of forms that have no material existence, quantities that measure nothing, and languages that for ages have ceased to be vernacular. I am inclined to think that among such studies, valuable for process rather than result, Music has a right to a very high place. It is a language—a living language—a language which, written, is intelligible to students of all nations, which, spoken, has a meaning for all mankind. has its history; it has its grammar; and it abounds in those delicate distinctions, it necessitates those reasoning processes which characterize Philology and Mathematics.

I am not contending that, as an element of education, Music should be substituted for Geometry or Grammar: it will have a better chance of success if it be added to these: for the powers of mind which they tend to develope are essentially those which, brought to bear on Music, would ensure a successful cultivation of it. It is because the cultivation of Music has been chiefly among those from whom, for the most part, the discipline of mathematical and grammatical studies has been withheldit is because the training of musicians has been too narrow, that, as a means of discipline, Music is undervalued. It is no fair argument against musical studies, that a few persons, a portion of whose organization has been precociously exercised and unnaturally developed, are found able to jump-if I may so speak-at conclusions which a mind more healthy and better balanced, would only reach by successive steps. We all know how easily uneducated persons pick up language; we all know that very elaborate sums have been done by "inspired idiots" who could give no account of their process of working them: but no one has ever thought a whit the less highly of Grammar or of Algebra, because here and there we meet with a courier who knows all the dialects of Europe, or a calculating boy who can work an equation without a slate.

It will be supposed that I have not made these remarks without some practical object; that I do

not intend to waste this opportunity of addressing those who show, by their presence, an interest in the subject we have under consideration, by indulging in complaints of evils for which there is no remedy, or indicating objects which there is no means of attaining. If I seem to speak disparagingly of the state of Music among the higher classes, it is from an earnest desire that it should improve, and from a belief that it is possible—I had almost said easy—for it to do so: and if I have pressed somewhat urgently upon your serious consideration the claims of Music as an essential part of a good education, it is from a conviction that until it is seriously considered as such, a fair experiment of its effects on the heart or the head will never be tried.

My duty in the Institution where we have this week begun our labours, will be to give lectures, or more properly speaking, lessons in the elements of Vocal Music,—in the theory and practice of singing. The art of singing may be divided into two branches. The first of these consists in an acquaintance with the signs and characters by which musical thought is represented, and a certain sympathy between the eye and the ear which will enable the possessor to know the sound of what he sees before him. Practically, this knowledge is shown in the power of what is called "singing at sight." Perhaps clearness would be a gainer, were the term musical reading applied generally to it; for the word singing, I think, should

express rather the more mechanical art of managing or playing upon the voice.

To form a singer (in the largest sense of the word) knowledge and skill in both these departments of Vocal Music are indispensable: but they may be, and often are, pursued separately. There are persons who can, what I have called, "read" anything; who can sound correctly as to time and tune any passage within the limits of their voice, but who are incapable of giving to it the smallest effect of grace or beauty. Such persons cannot be said to be able to sing at all. On the other hand, there are those whose whole attention has been devoted to the executive parts of the vocal art, who have cultivated their voices to a wonderful degree of power and flexibility, and have attained exquisite skill in the management of them, who yet are not only wanting altogether in that sympathy of eye and ear of which I have spoken-who not only cannot "read" Music at all, but cannot even discriminate the letters of the musical alphabet.

Now, it is this last class who have brought Music into disrepute, who have degraded "the fair gift of God, near allied to Divinity" into a mere mechanical art of external imitation. And it is to this class that the great majority of amateurs in good English society aspire to belong. I do not mean that the great majority of amateurs (ladies more especially) are altogether unacquainted with the use of musical signs

and characters; but I say it advisedly, that if a copy of the simplest melody that ever was written were to be put before any number of ladies in an ordinary musical society, three-fourths of them would have no more idea of its effect, without first playing it on a musical instrument, than they would of the meaning of an inscription on one of the Xanthian marbles.

It might be supposed, from the large number of persons who thus turn their attention exclusively to mere execution, that the art and science of reading music was incalculably more difficult of attainment than the art of singing. Nothing can be further from truth. Of the hundreds and thousands who essay the latter, how few comparatively succeed! How rarely, in society, do we hear a solo really well executed; how rarely even in public! How many of those who make singing a profession, have to learn from public indifference or disapprobation, the bitter truth, that neither nature nor art have done for them enough to make them worth hearing!

The art of reading Music, which I cannot but think is a more becoming subject for private study than the art of singing, is unquestionably one in which success is much more easy to attain. And with this advantage: that whereas nothing short of very, very high excellence in the latter is of the slightest value to those who perform or to those who listen, in the former, the least skill is a source of great pleasure to its possessor, and will often serve to complete an aggregate effect of considerable beauty.

One more remark must be made in relation to this matter. Though instances have been presented of the combination of much mechanical skill with little science, the very highest excellence in the first, has never been attained but by those whose knowledge at least equalled their power of doing: and it is notorious that where considerable mechanical skill has been raised without a foundation of musical science, it has been raised at a cost of time and with an amount of wearisome and absorbing toil, which no human being has a right to give to any one single pursuit.

Believing that the art of reading Music should be the principal subject of our study, and that the influences of Music will never be rightly felt until it becomes a common accomplishment; believing moreover, that supposing even the art of singing to be our desideratum, we should do best to rear it on the basis of the art of reading; you will anticipate that the course of lectures I propose to give in this place will be devoted more especially to the latter. A few words concerning the knowledge and power necessary for what is called singing at sight and the method of attaining these, will not be out of place, nor, I trust, without interest.

In respect to every musical sound, whether produced by a voice or an instrument, we have four

things to consider:—its intensity, its quality, its duration, and its pitch. The consideration of the two first of these properties belongs more especially to the art of singing. The intensity and the quality of vocal sounds depend on a variety of causes, chiefly, though not altogether, physical. It may not be useless to remark that the particular organs upon which intensity or power of voice depends may, by judicious practice, be enormously developed and strengthened. And even as respects the quality or timbre of a voice, modern researches have tended to show (I allude more especially to the beautiful experiments of Professor Willis of Cambridge) that even the quality of a voice is much more under the control of him who exercises it, than has generally been supposed. It is however with duration and pitch that we have now to do.

Musical sounds are represented by characters called notes. The particular sound for which a given note stands, is known by the place of that note on certain parallel lines called a stave. The length of a sound, in proportion to others about it, is known by the particular shape of the note which represents it. Some understanding of the places of the notes on the stave and of their different forms is indispensable to the slightest musical power: the tune of the last new ballad cannot be made out with one finger on a pianoforte, without it. And yet, even this subject is full of interest, and will afford no insignificant amount

of exercise to the judgment and to the memory. The powers of the different clefs, their various positions on the stave, the history of the different forms of notes, and the origin of their seemingly fantastical designations, are matters in which I have again and again seen the greatest interest manifested.

Let us take an example. Most people will know that the forms of notes used in modern Music are called semibreve, minim, crotchet, and so on. first thing learnt about these notes, entirely belies their etymology. The beginner has to swallow the apparently indigestible fact that the longest note in modern Music is called a semibreve, i. e. a halfshort, and the next in length to it, is called a minim, i.e. a smallest. Certainly on the threshold of his musical studies he will add to his experience that he is living in a very "fast" age. But let it be told that these are two out of five names, three of which have fallen into disuetude, that there were once five forms of note in use,—the maxim, (greatest) the long, the breve, the semibreve, and the minim, -and the seeming absurdity is removed.

Again, as to the places of notes on the stave. Here we have one of the thousand examples of the most scientific explanation being the most simple. Everybody who has ever attempted to teach the elements of pianoforte-playing to a child (or indeed to an adult) knows what a stumbling-block is presented by the use of the two different staves. An

intelligent pupil who is told that a note standing on the fifth line of the Bass stave is called A, and that a note standing on the fifth line of the Treble stave is called F,—that what is B on the left hand is G on the right,-will, if he be not too much confounded with this tremendous fact to think at all, have a fair right to consider that the caligraphy of Music is a mass of confusion. But show him that the Bass stave is only the lowest five lines, and the Treble stave the highest five lines of one great stave of eleven lines, in which the notes of the scale occupy every position in uninterrupted order, not only will the stumbling-block appear in its true aspect as a contrivance of amazing convenience and beauty, but even the Alto and Tenor staves preceded by the C clef-the despair of dilettanti-the horror of musical publishers—will be regarded with complacency and hope.

To those who cultivate Music merely as a craft, all such considerations as these are a waste of time: to those who would know it as an art and a science, they are of the highest interest.

The facts to which I have alluded relate to symbols with which every performer, vocal or instrumental, must be familiar. But they have a greater significance, a deeper meaning for the former than for the latter. The instrumental performer sees in the position of a note on the stave, a sign that he is to place his finger on a certain key or part of a string,

or that he is to give to his lip a certain form and pressure; if he do this with mechanical correctness, the sound will answer to its symbol. Not so the singer. He cannot, by any mere mechanical act, put his larynx into such a position as to ensure the production of any given sound. C sharp is not visible to the naked eye, nor is the dwelling-place of B flat at any appreciable distance between the top of the windpipe and the opening of the pharynx. The singer must know the sound due to the note he sees, before he can possibly sing it with certainty and correctness. In this consists the difficulty of what is called singing at sight.

To the possession of this power considerable study as well as practice is necessary. The instrumentalist ought to know, the singer must know, the various systems or scales into which sounds can be classified; and how, by the varieties of combination and succession which these sounds afford, the different relations or intervals between them are produced. For, the sound due to a note must be known, either from its place in some scale or system to which it belongs, or by measurement from some other note sung before it, or at the same instant with it.

The constructions of scales and their relations to one another, and the nature and properties of the various intervals, will occupy a very prominent place in the course of lectures I shall have to deliver in this Institution. Indeed these subjects must form a very large part of every course of a similar kind wherein any object is sought beyond the filling up of a few vacant hours; I shall be greatly disappointed if you are not much interested in the consideration of them. Amused, you will not be; for amusement is not the business of an honest teacher;-I might add of an honest pupil;—but there must be some grave deficiency in the method or the manner of one who does not make his lessons interesting. That they be equally profitable, depends as much on his pupils as on him. Those who labour to improve and to simplify modes of instruction always get the credit, or discredit, of attempting or intending to do a great deal more than they even think of attempting or know to be possible. In my own case for example. Some people think that I have put together a book which will enable them to sing at sight. How, or from what that ever I can have written or said, this impression is derived, I know not: all that I conceive it possible any book or course of lessons on Music can do, is, that diligently read and thoroughly practised, it will enable those who read and those who practise, to set about the study of classical Music in the right way. This is what the method I have published pretends to do; and this is what it has done in a thousand instances. That these instances have been more numerous among one class of society than another, is a matter for congratulation rather than condolence. The achievement of that which was thought impossible, may fairly encourage us to attempt what can only be considered difficult.

I sincerely hope that what the Training Colleges of the National Society have done for the musical education of the poor, this institution may be the means of doing for the musical education of the rich.

XIV.

ON HARMONY.

BY

WILLIAM STERNDALE BENNETT.

To those who have already made any progress in the study of "Harmony and the Elements of Musical Composition," my Lecture will, I fear, possess but little interest. I have purposely framed the remarks which I am about to offer, with a view of addressing them to the untutored student, and to carry out this intention I have chosen the most simple language adequate to the occasion, avoiding the use of more technical terms than absolutely necessary to the proper explanation of the different branches of the subject coming under our consideration.

It cannot be denied that musical students of the present generation are evincing a strong desire to become better acquainted with the science. Simple mechanical perfection is in itself insufficient to confer on the performer the honourable title of musician.

It is not my desire to depreciate the value of

mechanical power. I should not however be doing justice to you or my subject, did I not most strenuously urge the necessity of combining with your practical attainments a thorough knowledge of the fundamental principles of Music.

The celebrated Albrechtsberger, one of the profoundest musicians the world has known, the valued tutor and adviser of Beethoven, recommends the study of Harmony as "indispensable to the success of all who devote themselves to music even though endowed with the finest genius."

An eminent English authority (the late Dr. Crotch*) has, in his very interesting lectures delivered at Oxford, in his official capacity as Professor of Music in that University, very clearly described the advantages of theoretical study. After some interesting observations on the doctrine of Harmonics, (a matter which is not at all within our province to consider on this occasion) he thus expresses himself: The study of Harmony and the rules of Composition is of yet greater practical utility. It necessarily induces a knowledge of the clefs, and a power of reading from score, and of playing thorough Bass.

A knowledge of the derivation and inversion of concords, the resolution and preparations of discords, and the construction of counterpoint in general, will facilitate the reading of music at first sight,—an

^{*} Lectures on Music .- London: Longman and Co.

object of the highest importance to any performer ambitious of being called a musician.

An acquaintance with the various kinds of unessential notes in melody will improve the extemporaneous performance of them.

Rhythm, accent, emphasis, and the divisions of time, should be well understood to be properly expressed in the performance.

Modulation requires much study, or the changes of key will resemble the capricious and unaccountable shifting of scenes in a pantomime.

The treatment of subjects in canon, fugue, and imitation, must be much studied to be performed with good effect, or even heard with due relish.

Such are some of the advantages of the study of Harmony to the musician in general; but to young composers a knowledge of its rules is indispensable.

I propose at a later period of my discourse to take this quotation into closer consideration, attempting a short analysis of each different section, and explaining many things at present perhaps unintelligible to you; but which, once understood, will, I doubt not, have full weight and influence. Before doing this, however, and to make the inquiry into our subject as complete as is practicable within our short limits, I must call your attention to the first and very important step in the study of Harmony,

viz., the table of Intervals, aptly described as the "Alphabet of the Science." It is much to be regretted that a thorough knowledge of this table is not enforced at the very earliest period of musical study, by which I mean when the student first commences to sing or to play. Perhaps many of you in your performance, whether of vocal or instrumental music, seldom give a thought to the actual distance (technically called an interval) between any one note and that which immediately succeeds, and would, if called upon, be unable accurately to describe it: you might be questioned as to the number of tones and semitones forming the interval; whether the interval were major or minor, whether perfect or imperfect; and if your answer were not ready, you would confess yourselves to be unacquainted with the "Alphabet of the Science." In the case of a vocalist, (not naturally gifted with a correct ear,) much false intonation and uncertainty would be avoided by the facility of readily calculating the precise interval comprehended in any skip in a melody. A knowledge of the number of semitones between two given notes is often the means of reaching the distant note in safety. This remark is alike applicable to vocal and instrumental performance; in the latter case it cannot be denied that much uncertainty and inaccuracy in exhibition, is at once to be traced to an imperfect calculation, both of the distances set down in the

288 WILLIAM STERNDALE BENNETT

music, and of the spaces and divisions of the key board.

I will now proceed to my proposed analysis of the quotation from Dr. Crotch's work, taking each Section in its order.

The Study of Harmony and the Rules of Composition necessarily induces a knowledge of the clefs, and a power of reading from Score, and of playing Thorough Bass.

All students in Harmony should be acquainted with the various clefs used in the vocal scores of the classical masters. I suppose you, of course, to be acquainted with the Treble and Bass clefs, such being in constant ordinary use; in addition to these you must be able to read and to play from the three C clefs—viz. the Soprano, the Alto (or Counter-Tenor). and the Tenor—these are called the C clefs; because on whichever line of the five you place the clef, that line represents the note C; the low C of the treble. called the middle C, which you find about the middle of the key board on a pianoforte. Thus the Soprano clef is placed on the first or lowest line, the Alto clef on the third line, and the Tenor clef on the fourth line, all corresponding to the same identical sound, a point from which you can readily make your calculation for other notes, until habit and experience give you greater facility. Your early exercises should

be written for voices and in the different clefs of which I have spoken, the intent of the first regulation being to induce a sober and quiet walk of the parts, the latter restriction to insure the natural compass of each voice for which you are writing; since, by confining such voice to the limit of the five lines (or at the most one ledger-line above or below) you have its natural register, and each voice having a different compass and a different line for the clef, the good effect of the harmony is secured by the proportionate distance existing between each part.

So much for the importance of this matter as regards the exercises you will compose; but not less important is it, that you should at once be able to play lessons and extracts from the works of the great masters, which would influence your taste and serve you as models. To you who are players on the pianoforte, in no other respect would this be difficult. save in the non-acquaintance with the clefs: this difficulty overcome, a mine of rich and noble music is open to you. The Oratorios and other works of Handel and Bach (I do not allude to arrangements) are written in the different clefs, and, to bring the case nearer to our own time, the full scores of Beethoven, Spohr, Mendelssohn, and other great composers. Let me suppose any of you, being excellent practical performers, and, in the ordinary sense, good sightreaders, to be called upon suddenly, in a little musical

[Q. C. LEC.]

society, to preside at the pianoforte and to accompany a simple glee written in the usual clefs, how disappointed and vexed must you feel in being obliged to decline the invitation, simply from your ignorance in a matter so easily accomplished! Let me then earnestly recommend you to become practically acquainted with those clefs, which, as I have already frequently insisted, are in constant use with the classical authors.

Thus then "the Study of Harmony" induces a knowledge of the clefs, and a power of reading from score, and (which remains for me to explain) of "playing Thorough Bass."

The term "Thorough Bass" is often used as a title to works written on the Theory of Music: in this sense it is considered as a guide to the knowledge of the fundamental notes, or roots of chords; in the sense of Dr Crotch's quotation it implies a tact in the performance of accompaniment to other voices or instruments from a simple bass line, over or under which are given the figures indicating the necessary harmony to be added; where no figures are found over a bass note, such note receives the Harmony of the Triad, or Common Chord. An experience and facility in this species of accompaniment is extremely useful in the present day, although its necessity is in a great measure superseded by the much wiser plan, of the composer writing out

in full his accompaniment, and not risking the danger and inconvenience of this musical Shorthand. The student in "Harmony" will find but little difficulty in playing "Thorough Bass;" this power will naturally increase according to the knowledge acquired.

I will now proceed to the next point.

A knowledge of the derivation and inversion of Concords, the resolution and preparation of Discords, and the construction of Counterpoint in general, will facilitate the reading of music at first sight,—an object of the highest importance to any performer ambitious of being called a musician.

The facility of reading music at first sight, cannot be too highly rated; it is, as the quotation expresses, "an object of the highest importance" to those performers who would be considered musicians. Let me draw your attention to the distinction here made betwixt the mere mechanical performer and one who comprehends the science, and who may then be called the "musician." To achieve the latter title will cost you severe study. To gain a knowledge of the derivation and inversion of Concords, and the preparation and resolution of Discords, will require much patient application, many exercises from your pen, and much information from your instructor. You will perhaps be anxious to have it

292 WILLIAM STERNDALE BENNETT

explained how this knowledge can influence the matter of sight-reading; I will in a few words endeavour to satisfy you. It will enable you in many instances to anticipate the composer's intention. preparing you for that which is coming, and in a measure, certain of the Harmony which is to follow. For example, the preparation and resolution of Discords are regulated by the laws of Harmony, each note in the discord having its particular walk: if therefore you have learnt properly to prepare and to resolve a discord, and are able at a glance to comprehend the Masses of Harmony coming under your eye, the anxiety of sight-reading is materially reduced. The study of Counterpoint, which is the art of adding voices or parts to one which is given, is a branch of the science which it would be here premature to consider; it is however quite certain. that students, whose industry has carried them to this point, cannot but feel the beneficial influence of this new acquirement of knowledge upon their performance in general.

We come now to the third Section.

An acquaintance with the various kinds of unessential notes in Melody will improve the extemporaneous use of them.

A Melody is formed of essential and of unessential notes; in other language, of real and unreal notes. Essential notes are by some authors described as those which determine the nature of the harmony; unessential notes those which are not reckoned in the harmony, and employed but conditionally; these latter being never used without essential or real notes. This will at once shew you the necessity of that knowledge which will enable you to distinguish between the one and the other.

Unessential notes may be classed as follows:

Passing notes,
Appogiaturas,
Adjunct notes,
Notes of anticipation.

I will not attempt an elaborate explanation of these kinds of unessential notes; this could only be done for those who have already made some progress in the study of Harmony: I trust, however, I shall be able to explain so much as will lead you to confess the force of Dr Crotch's words, viz.: that an acquaintance with the various kinds of unessential notes in Melody, will improve the extemporaneous use of them.

Many classical authors both in the sacred and secular style have given to the world the simplest outline of some of their compositions, relying upon the performers to add those graces and embellishments, which, to be in keeping with the general feeling of the work, must be the offspring of correct taste and judgment. I am now speaking of solo music only, whether vocal or instrumental: where two or more performers are concerned, it would be unreasonable to expect the same idea of grace and embellishment, and were all allowed to exhibit their own feeling, much confusion and incoherency of style would be apparent, to the sad injury of the composition.

It is well known that Mozart was in the habit of penning the mere skeleton of many of his pianoforte compositions, writing the simple frame-work upon which was to be hung the requisite embroidery and ornaments. This ornamental part of performance cannot be effected without an intimate knowledge of essential and unessential notes; indeed, to perform a much less onerous task, that of playing ornaments and graces already prepared for you, requires nearly the same amount of intelligence.

"Formerly," says M. Fetis, in his History of Music, "the composer wrote the air plain, and left the selection of these foritures to the singer; a circumstance which added to the variety of the music, for all the performers not being guided in the same manner, they chose their embellishments according to the inspiration of the moment, so that the same piece was almost always produced under a different aspect. When the schools of vocal music began to decline, the singers were less capable of choosing for

themselves the ornaments suitable to each kind of piece, and the thing came to such a point, that Rossini found himself obliged almost always to write the ornaments with which he desired to embellish his melodies. This method at first had a pretty good result, which was to disguise the weakness of the singers by making them repeat a lesson, but in the end it had also the inconvenience of rendering the music monotonous, by presenting it always under the same aspect; and, further, it accustomed the singers no longer to take the trouble to seek for new forms of ornament, since they found them already made to the extent of their means of execution. This finished the ruin of a school, of which there are now no traces remaining." This ruin is here clearly traced to the neglect of the fundamental principle of music. They who cannot distinguish an essential note from one which is unessential, or a mere note of embellishment, are doubtless unfit and unable to be entrusted, either with the extemporaneous composition of a cadence, or even with its performance. Before quitting this point, let me observe, that I am no friend to meretricious and unmeaning alterations in the text of the composer; it will be for you to consider the true intention of the author, before you venture to deviate from his simple text, and whether the form of composition demands your interpolations. cannot arrive at any correct opinion upon these points,

296 WILLIAM STERNDALE BENNETT

unless you have made a thorough acquaintance with "the various kinds of unessential notes."

The next branch of our subject is of the greatest importance.

Rhythm, Accent, Emphasis, and the divisions of Time, should be well understood to be properly expressed in the performance.

A very excellent theorist and esteemed English composer (Dr Callcott) says in regard to this portion of our subject, "Rhythm is a very important, but at the same time, a much neglected, branch of music; neglected by singers, greatly to the detriment of expression, and even occasionally by the most eminent composers, who have thus marred the effect of some of their finest compositions." Mr Goss, in his very complete and lucid work on Harmony, says, "By Rhythm is understood the due arrangement of musical ideas in regard to time and accent; as in ordinary discourse and poetry a stress or accent is laid on particular syllables, so in music an accent is laid on particular notes." In the words of another author, "Rhythm is the measure or portion of time occupied in intonating a succession of notes or reciting a verse in poetry, and as it follows or deviates from the proportion of time spontaneously measured out by the ear, is said to be more or less perfect. Rhythm is also compared to the beautiful proportion

of architecture; thus when a musical idea is too short, too long, or unequal, it destroys the general effect of the rhythm, as false proportions in architecture offend the eye. Rhythm is therefore musical symmetry 1."

These quotations, it will be seen, bear both upon composition and performance, and if important in one must be equally so in the other. Let us take it for granted, that the compositions of classical masters possess these beautiful proportions of structure; it is then necessary that you be able to discover and develope them in your performance. Without this power of "phrasing," your exhibition would resemble the case of one reading without any attention to the punctuation, whereby the sense becomes distorted and rendered unmeaning. Strict attention to Rhythm, accent and emphasis, and the divisions of time, should be the ruling thought of every composer and performer.

Let us proceed.

¹ In Dr Burney's History of Music, we find as follows: "From the strict union of poetry and music among the ancients, which seem to have been almost inseparable, an offence against time or rhythm was unpardonable, as it not only destroyed the beauty of the poetry, but sometimes even the meaning of the words of which it was composed. Plato refused the title of musician to every one who was not perfectly versed in rhythm. It is of such importance that, without it, music can have no power over the human passions."

Modulation requires much study, or the changes of key will resemble the unaccountable shifting of scenes in a pantomime.

These are very plain words, but they certainly give you the truth. Sitting down to the instrument to perform some important piece of music, you would perhaps wish to make a little prelude before commencing.

I do not mean to say that in every case this is requisite or in good taste, but at any rate you should be able to accomplish this little task with facility and correctness when required, taking care that the harmonies which you employ are properly allied to each other. The inferior musician is often detected by this simple test. You are perhaps called upon to give your opinion upon the merits of a pianoforte; it is necessary to prove both the power and quality of tone; a ramble must be made over the entire keyboard. The sostenuto powers of the instrument must be tried by the impromptu performance of some little melodious phrase, the distinctness by passages of different character, and all this should be done in a musician-like manner; let me ask you then, Have you ever attempted this? and have you not found it the most nervous task that could be invented?

Why have you found it difficult? And why would you rather play ten pages of difficult music than ten bars of your own invention? The reason

is this—You have not studied this branch of harmony, Modulation. I am quite aware that there are other graver reasons why you should study Modulation beyond these I have pointed out, and which you will find when you become a student; on this occasion, however, I confine myself to the most familiar cases likely to arise.

I come now to the last Section.

The treatment of subjects in Canon Fugue and Imitation must be much studied, to be performed with good effect, or even heard with due relish.

Charles Philip Emanuel Bach, one of the family of the great Sebastian Bach, says, in his Essay on the true style of playing the Clavichord (printed 1762), He who would move his audience must himself be moved.

Therefore the student who would wish properly to exhibit in his performance the true and clear development of the highest specimens of musical science, viz. the Canon Fugue and Imitation, must be thoroughly acquainted with the structure of these compositions. Any performer who does not clearly understand the design of the composition which he is called upon to interpret, cannot expect that any audience will enter into the spirit of the work. You who would undertake the performance of an elaborate fugue should be competent (I will not say to com-

300 WILLIAM STERNDALE BENNETT

pose but) to analyze one—you should be keenly alive to the ingenuity of the author, and evince this sensibility by the greatest point and clearness in the execution of your task.

I do not think it necessary to enlarge upon this point: its grand importance is sufficiently obvious.

Such, says Dr Crotch, are some of the advantages of the study of Harmony to the musician in general, but to young composers a knowledge of its rules is indispensable.

Let me then hope that enough has been said to awaken your attention to the necessity of studying "Harmony and the Elements of Musical Composition." I am quite aware that much less has been said than the great importance of the subject deserves; but addressing myself to the untutored student, for whom this little address has been specially framed, I have intentionally limited myself to the review of what may be termed "the outskirts of the study," shewing (and I hope in a measure successfully) the influence which a knowledge of the theory must have upon practical performance.

It may be advanced, that many brilliant performers can be found (both vocal and instrumental) who have never troubled themselves with the study of these fundamental principles of music, who can read well at sight, perform extemporaneous cadences, play the higher styles of music with intelligence and in the spirit of the author's intention: I am not prepared to deny this; indeed, I have met with such cases; but before you take them as your models, be sure that you possess the same amount of natural talent, or, better still, take them not as examples—rather lament that such gifts from above have been so fruit-lessly bestowed. Let me remind you in the way of encouragement, that some of the greatest musicians the world has known, have submitted patiently and willingly to the trammels of severe study. When, by experience in the art and science, you are competent to analyze the masterly works of Handel, Bach, Mozart, Haydn, Beethoven, Spohr, Mendelssohn, and others, you will be convinced that not genius alone has effected these wonders.

I trust that nothing which you have heard from me on this occasion will lead you to suppose that I under-rate the claims of the practical performer; much knowledge and fine feeling existing in many musicians would lie dormant and unacknowledged without this agency.

Let me name some great performers from among the greatest musicians.

Sebastian Bach. One of the greatest Organ and Clavier performers of any age.

G. F. Handel. To whom the same words would apply.

Mozart.1

¹ See Holmes' Life of Mozart.

Beethoven.

Spohr. A great violinist.

Weber. A great pianist.

Mendelssohn. A wonderful performer both of the organ and pianoforte.

These great masters knew well the advantage of combining the power of mechanical skill with deep knowledge, and the result is fully known to all interested in music; but that of the two branches most important is, doubtless, the theory—this point must be maintained. I conclude then by reminding you that the performer who is ambitious of obtaining and deserving the title of musician, must study "Harmony and the Elements of Musical Composition."

ON THE FINE ARTS,

EDUCATIONALLY CONSIDERED.

BY

HENRY WARREN,

PRESIDENT OF THE NEW SOCIETY OF PAINTERS IN WATER COLOURS.

In my position, as regards the course I shall pursue: of necessity, a middle course, that shall apply generally, as well to those who, having already studied art to a certain extent, more or less, are conversant with what may be called its technicalities, as to those of my hearers, who, having turned their attention wholly to other and different studies, may be altogether unacquainted with them.

Our first consideration shall be the enquiry, What is art? or rather, What is understood by the term, Fine Arts?

"The desire to imitate the objects which we see," says Agincourt, "is a sentiment born with man." In consequence of this natural arrangement, imitation becomes an art whenever the means employed to obtain exactness are submitted to rules, and reduced to principles.

The three arts of Drawing or Painting, Sculpture and Architecture, owe their origin to this natura sentiment; and all three derive also their perfection from the enlightened employment of rules dictated by reason and taste. From this it is evident that the germ of the arts exists in every nation; but that the means employed by each, and the degree of perfection to which they may arrive, can never be the same, in consequence of the difference in climate, manners, religion, and government; the influence of which must ever be most powerful and inevitable."

By the practice of art then, we are to understand, the effort of the mind, through the agency of the hand, to reproduce, by imitation, such representations as shall address themselves, through the eye, to the sentiment of taste.

This may suppose a state of refinement in society; but the same will be found to obtain in a less advanced state, for even in the savage, in whom we find the lowest grade of civilization, or cultivation, we discover some attempt at art—some effort to reproduce by delineation the representations or appearances of nature around him. The difference therefore, with respect to art, in delineation or expression, is only in degree between the savage and the civilized man, and this degree is what now comes at once under our review.

The desire of art is brought about by leisure; the production of it, by circumstances or early wants.

Art is essentially a human creation, and in all its stages addresses itself to human sympathies.

The form and character of art will be found, as has already been hinted, to belong to circumstances or requirements, and thence in its varieties to certain peoples and countries; but in all cases arising out of an idea or wish to excite admiration. For this the Sandwich Islander clothes himself in gaudy attire, or punctures his skin with the forms of animals, or other objects with which he is conversant. He even goes further, and creates as it were such fanciful forms of ornamental painting on his face, body, and apparel, as his taste dictates, or his slender acquirements furnish the idea of. It follows then that the lowest degree in the sentiment of beauty has been attained by the savage, while the civilized European has mounted almost to the sublime, in the production of what are at this day quoted, whether in painting, sculpture, or architecture, as the highest attainments of art.

I have said that art is brought about by the requirements or exigencies of time and nation, springing in the soil, growing through time, nurtured by intellectual culture. The plant though indigenous is always susceptible of improvement by grafts from foreign stocks. After a succession of prunings and buddings, it seems as it were to branch out from its own selfish nature, bearing blossoms, not only of beauty—of rare beauty—but such as throw out a

fragrance that sublimates the senses to a refined state of delight. Its root is the gratification of the senses: its fruits the pleasures of the mind.

In proof of the purity of the Fine Arts in their high state, may be adduced the fact, that in proportion as a country advances or retrogrades in civilization, so grows or degenerates the state of Art in that country. It needs not that proofs be brought forward. The fact is fully and extensively known. In stating this, however, I will admit, that shortly after the introduction of Christianity the Arts became degenerate, and remained so for a long period. Let it however be remembered, that so great and glorious a change as was then effected throughout the whole civilized world, brought with it a consequent new and infant state of things. The change was absolute. It was a re-birth; and as it was the infancy of Christianity, so was it also another childhood of Arta transplanting of the root into a soil requiring a new and a different culture. It pined, it is true. through a long series of years; not through any deficiency in its own nature, but through the inexperience of its new cultivators, and the neglect of its old ones. But it ultimately did flourish. It has blossomed under the pruning-knife of a Raphael, and at this day promises abundant fruit; whose clusters are destined, like the golden grapes of the Temple, to adorn the high edifices of religion, and spread their fragrance through the broad halls of

refined taste; to be the pointing signs to where reside the pleasures of the mind, as distinguished from those of mere sense; to the abodes of pure delight and rational enjoyment, wherein are seen to enter physical beauty hand-in-hand with moral excellence. In noticing, however, the decay of Art at that period, it may be well to state that such decadence commenced under Pagan direction, and quite independent of the new feeling. The Emperor Hadrian, himself a painter, may be said to have wrought, though unintentionally, the disastrous change. The interest he took in the Arts induced him to institute schools in all the various styles, Egyptian, Greek, and Etruscan; a circumstance which operated strongly against the formation, among the Romans, of any individual school of their own, and indeed mainly produced the dismemberment of those which existed.

Commodus, from incapability and want of pure sentiment, furthered the mischievous tendency to profusion of ornament, the rock on which the Arts, under the emperors who followed him, split; and which was indeed the crowning evil that brought about the consummation of their fall. Let us, however, return to the infancy of Art; to that early time when Art was considered only as it was useful, independent of its moral advantages.

Necessity is vulgarly said to be the mother of 20-2

invention. Necessity was the mother of Art. Art is invention, to a certain extent.

Could we obtain an answer from the embalmed dead, who have lain for five thousand years around the almost eternal Pyramids, we should be told that Art had its birth in necessity—that Art was the first language of the mind. There, in that ancient of lands, Egypt, we obtain a corroboration of the great, the Holy Scriptures; and that alone through pictures, painted pictures, the language of the world. Again, to carry out, to enlarge upon, their meaning, we have the inscribed papyrus;—the sculptured hieroglyphics. And what are they? They too are pictures! The mighty Nineveh, after thousands of years, gives up her stores of historical knowledge; and they too are pictures—painted pictures!

Ask the Chinese, who dates farther back than our ideas of past time, and he will tell you that his letters, syllables, or sounds, are also pictures: the one a horse, the other a tree, and so on.

Go to what we call the New World, look at the monuments of Old Mexico, of Chiapas, and Yucatan. They too are inscribed, and with pictures—sculptured pictures! Aye! very sounds have their origin in forms—pictured forms. Art is the language of Nature.

Many a curious story could I tell in my own time, and of my own knowledge, where my brotherartists have found the truth of this assertion; even to the outline of a pig, or a fish, for their dinners' sake: nay, to the making out of a washing-bill!

We are now brought to a consideration of the uses of the Fine Arts. Let me ask my fair hearers to look into their drawing-rooms, into their libraries, even into their culinary offices: to look at every pitcher and cup their houses contain. Never, I ween, was a picture so largely, widely published as the well-known willow pattern of our common crockery, wretched as it is. But a better time for crockeryart is dawning. Who has not admired the beautiful productions of modern Art, in earthenware? and who, having visited the British Museum, has not looked with delight, with veneration, upon those wonderful achievements in beauty of form and texture - the Vases of antiquity - Greek, Etruscan, Egyptian; upon whose surfaces we may read, in picture-language, the histories and myths of ages; the very "form and pressure of the times" in which they were fabricated? Let my hearers look into the glass, and acknowledge the presence of Art!

"Beauty when unadorn'd, adorn'd the most,"

says the poet. But the Arts have a place, even in the arrangement of a beautiful head of hair. It is true, I have seen many head-dresses which I could not be brought to consider *beautiful*, even though they might be the perukes of my friends the Egyptians: but these form the abuses, not the uses, of Art.

Go, however, through the crowded city and admire her buildings and her useful adornments. Art is present in them all. Go into the fair fields, and look! Lovely Nature is rendered still more lovely by Art. The park of the noble is gladdened by her visits: her footprints are on the river's banks. She walks gladsome through the cottage-garden: her silent presence has been felt in the quiet churchyard.

But who can count the uses of Art? Many indeed they are, in all the ordinary circumstances and avocations of everyday life: but there is an utility in Art far, very far, above all this: its noblest achievement, its great end, is to elevate man; to humanize the animal: to unsensualize humanity: to lift the soul, and be the link between matter and mind. From this point the transition is natural and easy into the consideration of beauty. The first stage to this consideration is the acquisition, through the agency of the Fine Arts, of a just perception of beauty—of physical beauty—but it is a winding staircase of many steps which leads up to it. Each step, however, has its own value in position, and gives adequate remuneration for the trouble in mounting it. Let us then begin our ascent with determination, assured that each step will bring us nearer to the truth.

The desire to attain to the perception of beauty is the first motive in Art.

There is a beauty of the mountain as well as a beauty of the valley. There is one beauty of the rose, and another of the lily; in truth, everything in Nature is beautiful: but it is beautiful only in degree.

Dryden, translating Du Fresnoy, says, "We love what we understand; we desire what we love; we pursue the enjoyment of those things which we desire; and arrive at last to the possession of what we have pursued, if we warmly persist in our design. In the meantime, we ought not to expect that blind fortune should infallibly throw into our hands those beauties: for though we may light by chance on some which are true and natural, yet they may prove either not to be worthy, or not to be ornamental, because it is not sufficient to imitate nature in every circumstance dully, and as it were literally and minutely; but it becomes a painter to take what is most beautiful, as being the sovereign judge of his own art: what is less beautiful, or is faulty, he shall freely correct by the dint of his own genius, and permit no transient beauties to escape his observation."

Thus much from a great authority on the selection of beauty. It remains for us then to find something like a rule, to guide us in our search after her; a real standard we cannot hope for, but a something that, in default of better, shall stand for a principle we may endeavour to form for ourselves.

Sir Joshua Reynolds, in *The Idler*, has the following remark:

"I suppose it will be easily granted, that no man can judge whether any animal be beautiful in its kind, or deformed, who has seen only one of that species. This is as conclusive in regard to the human figure; so that if a man born blind, were to recover his sight, and the most beautiful woman were brought before him, he could not determine whether she was handsome or not; nor if the most beautiful and most deformed were produced, could he any better determine to which he should give the preference, having seen only those two. To distinguish beauty, then, implies the having seen many individuals of that species. If it is asked, how is more skill acquired by the observation of greater numbers? I answer, that, in consequence of having seen many, the power is acquired, even without seeking after it, of distinguishing between accidental blemishes and excrescences, which are continually varying the surface of nature's works. and the invariable general form which nature most frequently produces, and always seems to intend in her productions."

So much has been written on this subject by clever men, who have given to it years of study and observation, that it were vanity in me to enlarge upon it here. I will, however, venture a remark, that in respect to beauty of form, one point has been, as I conceive, overlooked.

The curve, the straight form, the serpentine, the ovoid, have all had their upholders, and their opponents.

Adaptibility to the purposes of nature in natural objects of usefulness, in such as are produced by man, is held to be the essence of beauty in all. Thus of form. On colour—beauty of colour—the arguments are apparently more conclusive, because there are more definable reasons in respect to their combinations; the same adaptibility to intended purposes coming into force also with respect to them.

With colour it is agreed that harmony, contrast, position, constitute beauty. Wherefore then may not the same reasons be advanced in regard to form? We should then come to the conclusion that variety, gentle inequality of lines, harmoniously arranged—for I contend there is as much harmony in lines as in colour—may constitute beauty of form. Be there, or be there not, a conventional feeling in respect to what is or is not beautiful in form, I think it will be conceded, that artists are pretty much of one mind, with respect to it, in their pictorial combinations.

Painters are in the habit of composing or building up their groups of objects, be they figures or otherwise, into pyramidal or triangular masses. This has become conventional with them, and has assumed the power of a rule, an established principle—I do not pretend to say that every artist could give you a

reason for this rule. He feels it however as a principle, and acts upon such feeling. Painters and sculptors are more than ordinarily creatures of impulse: the painter feels the principle, as I have said, to be good, and he hesitates not to adopt it.

But this room—this school—is not the place to quote a rule without a reason. I may express a fear, however, that much of the usual instruction in Art which is given to young persons, has been for many years sadly deficient in this particular: not only have no reasons been given for rules; but no rules given at all.

Now though the painter act upon a feeling alone, it must be recollected that such feeling has with him, in the course of long practice, grown by success into a based certainty: not so, however, with the tyro in Art. The student looks at every advance-movement for a reason why he or she should take the step; and it is the professor's duty to give it.

I shall ask your indulgence for an attempt here to give that reason in what I have dared to call the overlooked point—the *principle* of beauty, which I contend the painter seeks in the adoption of form or forms.

The power of the number 3 is extensively, nay, generally admitted. The pyramids and the Cyclopean arch attest it; music, poetry, all the arts and sciences know it; nay, it takes a higher place still; but I speak only of its force in respect to our present

enquiry, as it affects the working of a picture; to wit, there are three stages or divisions: Composition, light and shade, and Colour. Colour has its triad, and is complete in its number-red, yellow, and blue. Chiaroscuro is similarly divided into light, shade, and reflexion. I hold that Composition has likewise its triple form in character of line and general arrangement, its constituents being two opposing curved lines, and its intermediate straight line. But these lines, these colours, and these quantities of light, dark, and half-tint, must be judiciously and thus harmoniously combined, or we have no good result. They must all be, and in all cases, unequal, gently unequal, gently opposed; and it is this gentle inequality which constitutes the beautiful, be it in colour, chiaroscuro, or composition: not less, certainly, in the arrangement of lines, than of colours, or light and shade.

Hogarth's "line of beauty" so called, is formed of two curves and their intermediate line of junction; and were it gently unequal in its character and amount of curve, would be a beautiful form. If the same were put into perspective, the effect would be to a certain extent produced.

The Ovoid, or egg-shape, has by some been laid down, as one of the most beautiful forms. I hold it to be deficient in *variety* of form, all the curves following the same general direction. Take the same form and add to it curves in the opposite direction,

and one of those beautiful vases of antiquity, which the world through all ages has agreed to call beautiful, will be portrayed. Again, the ovoid is said to be beautiful as resembling the form of "the human face divine;" but how much more beautiful is the human face when accompanied by a beautiful throat, and a pair of beautiful shoulders! and what portrait-painter ever gives you the without the other? for thus he is enabled to give the necessary variety in the perpendicular lines of the throat, and the opposing curves in the approach to the shoulder. It may be noticed, that throughout the drawing of the human figure, opposing curves are always found, the projection of the hip on the one side, a consequent concavity of line on the other; and so throughout the whole, and in almost every view of the figure.

A painter of buildings would never think of giving you St Paul's dome without the upright lines of the other parts of the building. In trees nature gives us the necessary variety of line, so also in beasts—in birds. The Greyhound is said to be eminently beautiful. It is so, because these very peculiarities of outline are more apparent in its form than in that of most other animals. The Elephant, on the contrary, is voted an ugly creature. Why is it so? it has every adaptibility to its necessities and its nature. Its outline will be found wanting in the

required variety of curve; the back is rounded, the head is round, even the trunk is rounded, and all in the same direction. It has not even enough of tail to turn upward for variety's sake. There are, however, circumstances of action in the animal which materially alter the case. The back loses the uniformity of curve which is its general outline, the trunk is elevated and takes a curved form in opposition to the other lines.

Mountain forms are beautiful in their own endless variety of outline, but more so when contrasted with the straight and horizontal lines of water, as a lake or a river, and when varied by the upright lines of a temple or other building, as a portion of the land-scape.

I must not here be misunderstood to mean, that beauty of form depends alone on any particular character or direction of line, for I am well aware that custom does much to stamp certain ideas of beauty: our young ladies, on this account, are subject to consider the prevailing fashion of the day in dress, to speak generally, as pretty or becoming; while they look with horror at those fashions which the portraits of their grandmothers plainly tell them were considered equally pretty and becoming in their day. A child of this country invariably calls a black man ugly: yet Memnon was black, and he was considered "the handsomest man in the army" at his time, and that by a people to whom we may,

with propriety, give the palm as to the knowledge of what beauty was.

After all, we must not expect to find a canon of beauty. Polycletus, it is true, a native of Sicyon, who flourished about 430 years before the Christian era, left to the world, what was then considered by painters and sculptors, the standard or infallible rule of true beauty, as comprising, in itself alone, all perfection. Alas! it does not remain to us at this day. Enough of beauty, however, is open to us. We have thousands of fine works of Art, and then the wide field of Nature is spread before us, that we may select what and where we choose.

In the present day little has been done, little indeed attempted, towards education in Art, particularly in a public way. It is true, there is much difficulty attendant on it. There are few rules. fewer fixed principles, no individual standard; many roads, all running in different directions, and none of them paved. Among all our railroads, none conduct to the temple of the Fine Arts. But, as I have already said, there is no lack of excellent specimens of Art, in all grades, in all styles; though, first of all, there must be a love of Art, for Art's sake. Sir Joshua Reynolds says, "It is true, the beauties and defects of the works of our predecessors may be pointed out, the principles on which their works are conducted may be explained, the great examples of ancient Art may be spread out before

them; but the most sumptuous entertainment is prepared in vain, if the guests will not take the trouble of helping themselves."

Interest in Art goes hand-in-hand with the study of it: a love of it grows abundantly, and appreciation follows. But alas! appreciation of Fine Art is not general, because knowledge in its principles is so scarce. Unfortunately for this country, Art has been considered a private luxury, rather than a public enjoyment. "How can we expect," says Mr Wyse, "the public should enjoy, unless they appreciate; and how can they appreciate, unless those preliminary studies which lay the foundation of taste, and develop the sense and value of artistic excellence, form a portion, according to their respective means and position, of their early instruction? Take any one grade of society you may, ascend up from the lowest school in the country to the Universities themselves, and you will find that England is distinguished from the other civilized countries of the world, by an almost general exclusion of the culture and study, even of the elements, of Art."

It is one thing to know the language of words, as at the present day; it is another thing to know the language of forms; but should not the two studies, considering their intimate connexion, go hand-inhand?

"Let no man," continues Mr Wyse, "tell me he understands either Homer or Virgil, as Homer or

Virgil ought to be understood: I do not mean as a mere mechanism of versification, but as a philosophic, graphic, expression of the general intellectual and moral elements of their age or country, without such accompanying enquiries. It is well to know the several metrical theories, the various readings, the specific merits, of this or that edition, the historic incidents connected with either the production of the work or its preservation; all these investigations have not only their utility, but their merit. not complain of their cultivation, far from it: they are necessary conditions to the mere understanding of the author, but I complain of their exclusive cultivation. I complain that, cultivating these, they cultivate nothing more. I wish them not merely to understand, but to appreciate; to read antiquity through all its translations, not merely through Philology, but Art. Its spirit is not less written in the Venus, Laocoon, Apollo, the Elgin and Elgina Marbles, than in the pages of Horace, Virgil, Hesiod, or Homer. Æschylus, and Sophocles, and Euripides, have no nobler-nay, truer commentary, more steeped in their own spirit, more thoroughly, more accurately. themselves, than the myths of those splendid Vases: a gallery not only of ancient painting, but of ancient philosophy and poetry, which of late years have been fortunately exposed to the study and admiration of mankind. These are the rich illustrators, the cotemporaneous interpreters of real antique thought,

the best classics when joined to the classics themselves, and without which juncture vain the hope to pierce beyond the husks, or to reach, through the language, the literature, much less the general mind, of a country. In the more educated countries of the Continent large provision for education in Art, as an essential accompaniment to all intellectual cultivation, is made; not only in the more professional schools, but in every school, and of every grade, each in proportion to its grade and object. In the elementary school—the purely people's school—elementary drawing, fitted for the people's purposes, is taught; in the district, provincial, secondary school, this preliminary instruction is further developed; in the College and University, whilst opportunity is given for its manual cultivation, a higher object is aimed at: the philosophy on which it rests, and by which it is regulated, both intrinsically and in its relations to other departments of human thought and action, is pursued. There is scarcely an University without its regular Chair of Æsthetics, without Professors, whose province it is to give lectures and illustrations on the theory, principles, and history of Art. There is scarcely an University which has not, like that of Bonn, either its gallery of casts, drawings, engravings, &c. as well as library, or opportunity of easy and frequent access to one, to which the student can refer from the pages of his author for illustration, whenever he needs. It is

21

something to study antiquity in this double mirror; one day dwelling upon the fatal fortunes of Laocoon and his sons in the impassioned lines of Virgil, and the next, pursuing and completing the poem in the still more powerful production of Statuary.

And who can read the poetical descriptions of our own Thompson, our own Shakespeare, with so great a pleasure as the painter of our own landscapes—the watchers of our ever-varying atmosphere, beautiful as it is in all its untiring changes? Let me then advise my young friends to hasten and prepare themselves by a little study and application in well-based theory and wholesome practice; that when the sunny Springdays come, they may be early afield, pencil in hand. The traveller's best and most interesting journal is a well-filled Sketch-book.

Thus much have I said, because thus much I feel, in praise of the Art which I follow. I have lived among its enjoyments for many years, and I can say with truth, in the words of a great continental artist, "I would not barter the power, feeble though it be, of this hand to draw out what this poor head contains, for the wealth of half the sovereigns of Europe;" for to me my years of Art have been, throughout, years of pleasure. I have feasted on the delights of Art, and would willingly invite all to partake with me of the rich banquet which Nature, through the bountiful Creator, has so unsparingly spread before us.

XVI.

ON MATHEMATICS.

BY THE

REV. T. G. HALL, M.A.

PROFESSOR OF MATHEMATICS IN KING'S COLLEGE, LONDON.

TAD the Lecture which I am about to deliver L been introductory to the Course of scientific instruction given in these walls, I might have thought it needful, and due to my hearers, to attempt some more elaborate proof than I now find necessary, in order to shew that the study of Mathematics is not uninviting; and may in fact be rendered attractive to a class of pupils so different from that which now for 25 years I have been occupied in teaching. But the continued attendance of a considerable number of Ladies has shewn that there is nothing wanting on their part, and nothing very formidable in the nature of the subject, in whose principles and applications they here seek instruction. I know it has been said. and that too on no mean authority, that the study of Mathematics tends to unfit the mind for application to the purposes of life; that the unbending rigour of its demonstrations, and the never-failing accuracy of its processes, harden the understanding, and force it into an habit of demanding from other subjects of inquiry a kind of proof incompatible with the nature of the investigation. That there is some truth in this statement, it would be vain for me to deny; but the objection only applies with full force to those who exclusively study Mathematics, and who, enamoured by their favorite pursuit, render themselves by that exclusiveness unfit to enter upon any other train of thought or inquiry. The objection will equally apply to the mere painter or musicianequally to the philologist and the metaphysician. But remember, that while it applies to the student, it does not to the science. The rules of Mathematics are strictly true; and if there were always proper and sufficient data, it would not fail to expound the difficulties of political, economical, or moral science. But in this Institution, no hesitation on such a ground as that just alluded to need exist; the instruction given here is so varied, that no consequences of the kind to which I have referred can possibly ensue. In fact, it is not the aim of this Institution to confine the attention of those who come here for instruction. to a particular object of study or to a particular class of subjects. The prospectus opens a wide field of instruction—the flowers of literature and science are invitingly offered; and each may cull or reject as the taste or the convenience of each may choose. Least of all is undue prominence given to that class.

the interest of which I am now permitted to represent.

This being the case, I may now safely recommend my hearers to bestow at least a short time, in order that they may acquire some knowledge of a science which is unequalled in the precision of its languagethe correctness of its logic—the simplicity of its details—and the unerring accuracy of its conclusions. Surely the knowledge of the elements of such a science must be beneficial to the female mind, and it will be my duty to lay before you to-day, that which any one may easily acquire; which will not only add to your stores of knowledge, but which may be a source of profit and of pleasure. I shall not ask you to attempt the higher and more difficult paths of this science, but which have been reached and firmly trod by an Agnesi and a Somerville. I shall content myself, to use the same simile, with the plain, and with humble heights; assuring you, at the same time, that the more extensive the horizon is, the greater will be the beauties of the landscape.

Mathematics has been defined to be the science, which treats, 1st, of the abstract relations of Number and Magnitude; and 2ndly, their application, through the medium of observed laws, to the useful purposes of life and the explanation of natural phænomena.

From this description it immediately follows, that

Mathematical science divides itself into two principal The one, resting solely on our intuitive branches. perception of abstract truth, and demanding no support from inductive observation, and but little from an appeal to the senses, constitutes Pure Mathematics, and comprehends all inquiries into the Theory of Numbers, and the abstract relation of Extension and Magnitude. Its subjects therefore are Arithmetic, Algebra in its widest extent, and Geometry in all its applications, to figures inclosed by straight lines or curves, and to solids bounded by plane or curved surfaces. The other branch, named the Mixed Mathematics, taking for granted some law or laws deduced by observation from nature, connects the cause with the remote effect. Under this head we usually class Mechanics, Hydrostatics, Optics, and Astronomy; and we now include Heat, Electricity, and much of Chemistry. As an instance of Pure Mathematics, let the question proposed be: "Find two numbers whose sum is 20, and whose difference is 2;" the numbers 9 and 11 answer the question, since 9 added to 11 makes 20, and 9 subtracted from 11 leaves 2; but what 9 and 11 may represent, or what unit each is the multiple of, neither appears in the question, nor is necessary to its solution; the unit may be a lb. in weight, or £1 sterling; a foot, an inch, a mile; a horse or a house. This then is a question of Pure Mathematics.

But suppose this question be asked: "Find the space described in 5" by a stone falling to the earth in vacuo."

Now it can be shewn by strictly abstract reasoning, that for small distances above the surface of the earth, the space described in the second interval of time is 3 times as great as that in the first second: in the third second it is 5 times as great; in the fourth it is 7 times as great; in the fifth it is 9 times as great; and that the whole space is 25 times as great as the space described in the first second. But, to find the space descended by the stone in the first second, we must have recourse to experiment; and this space once determined, enables us ever after to find by mathematical reasoning the space so descended through, in any time whatever. This is a case of Mixed Mathematics: but my province is chiefly the Pure Mathematics, and to it I now call your attention.

Arithmetic, or the science of Numbers, in the ordinary meaning of the term, lies at the foundation of all scientific knowledge. It interprets the results we have obtained; and converts that which has the appearance of vague generality, into a form possessing almost a tangible certainty. Yet high numbers are really very unintelligible to us: we talk very flippantly of millions and thousands of millions: how little can we realize them! As an instance, the national debt of this country is said to be

£800,000,000, a sum which, if in sovereigns, counted out at the rate of 60 in a minute or of 3600 in an hour, for 12 hours each successive day, would consume more than 50 years, if a single computer only were employed. But this number, in miles, is less than the distance of the planet Saturn from us, when Saturn is nearest the Earth; and less than 14th of the distance of the newly-found planet Neptune from the Sun. But to return to Arithmetic: I own it is a very uninviting study; few persons can look back upon Long Division without a sigh or shudder; nor reflect on Practice and the Rule of Three without some painful recollections. In general we find, after the first four rules, another series of rules, which fatigues the memory and perplexes the understanding of the young arithmetician; that this is unnecessary. many of the modern books shew; but still much remains to be done, to free the subject from perplexing and needless difficulties. There are, however, parts of Arithmetic highly interesting, and these are, its Origin and its Vocabulary.

The idea of Number is one of the first presented to the mind of a child, and may be indeed considered as co-existent with his natural faculties; and had the child no instructor, we may suppose the operation of the understanding to be somewhat after this manner: he counts his fingers, the trees around him, and the other objects before his eyes. But these operations are at first performed without method, and

are limited in extent, and are the result of memory alone: but very soon the means of extending them, and of subjecting them to a kind of regular form, are found.

As the objects counted would be different, and yet the same method pursued, the child would perceive or learn that the nature of the things counted must be left entirely out of the consideration; and so to represent them, general symbols must be invented, which afterwards might assume particular values adapted to each question. Thus if the child were born of savage parents, he might employ little balls strung together as the beads of a rosary: or if an inhabitant of the Pelew Islands—the knots of a cord: and each ball or each knot might denote a sheep or a tree, as the case might require, and the whole assemblage of knots or of balls might represent the flock or the grove. But language must be called in to assist even in this rude mode of calculation; for without the aid of language, the quality of the objects could never be separated from their number. The child may understand the difference between 4 beads and 5 beads, and yet may have no idea of the number 4 as connected with 4 beads, it may be identical in his mind with the idea of 4, as connected with 4 sheep. But if his idea of the number 4 be registered in his memory by a specific word, independent of the qualities of the object with which it was at first associated, he will become, after an enlarged experience, accustomed to pronounce the word without reference to such association.

In this manner abstract numbers were formed, by attaching names to the series of natural numbers beginning from unity; but if this process of formation were continued very far, we should soon be overwhelmed with a multitude of disconnected words. By a singular agreement, almost all nations have adopted the decimal system of notation, which is suggested by the very natural custom of numbering the fingers on the two hands.

In our own country we have names for the first 10 numbers; the rest, with the exception of a hundred, a thousand, a million, being compound words. For the word eleven means leave one, and twelve, two leave, i. e., one above ten, or two above ten, the point from which the numeration commences again, or as it were, anew; the word ten is derived from a German word, signifying to draw, or take, as if from a heap or number.

This last remark will serve to explain the formation of our present system of notation. It never could have escaped the most superficial observer, that a conventional agreement has made the numbers increase from the right to the left. Thus the digit 3, which placed by itself expresses but 3, stands for 30 when a 2 is placed to the right of it, the whole number being then 32. How then did this method of computing arise? why should the law of the

local situation of the digits increase in this tenfold Ratio?

The following illustration may give a probable answer to the question. If a person, whose numerical vocabulary did not exceed 10, wished to find the number of pebbles (calculi, hence calculation) contained in a certain heap,—and, to make the case most like that of nature, we will suppose he reckons with his fingers,—he would most probably place his fingers in succession on the first 10: and having rejected 9, would keep 1, as a register of the completion of one computation. That done, he would count another 10, reject 9 of them, and retain 1, for the same reason as before; and he would proceed in the same manner till he would arrive at a set of pebbles less than 10: these must be left to themselves. But he remembers that each of the reserved pebbles belongs to a set making 10, and so each of them may represent 10: but these may exceed 10 in number, and the same operation being repeated, i. e. of rejecting 9 of each 10, and reserving one as a register, until a number arises less than 10; which last must be again put carefully by themselves—those latter reserved digits are then 10 times as great as the former reserved, and the latter remainder 10 times as great as the former, and thus we shall have a series of numbers increasing in a tenfold proportion.

To illustrate this statement by an example. Suppose that the heap contained 432 pebbles.

At the first computation, there would be 43 reserved pebbles and 2 over: put them by themselves in the column marked A. Again, if 43 be counted in the same manner, there will be 4 reserved pebbles,



and 3 remainder: put 3 in the column B, and 4 in the column C; but then each pebble of the remainder 3 represents 10 in the place A and each in C, 10 in the place B. Such is the probable formation of the decimal scale; and the mode of reckoning by pebbles or counters was used for a long time in this country. Shakespeare makes one of his clowns say, after being puzzled by some numerical question, "Oh! I must go to my counters." But the decimal notation is not the only natural one: another and a more obvious one is reckoning by 5, a method of computation which is found to exist. Humboldt has discovered tribes upon the Orinoco, who have no abstract names for numbers exceeding 4, and 5 is expressed by a word signifying the fingers of one hand, 10 by all the fingers, 20 by a word expressing all the fingers and the toes, 40 by the fingers and toes of two men, and Similar examples may be taken from other barbarous tribes, but we also find that Homer, in the Odyssey, makes use of a word signifying to count by It is in the passage where Calypso speaks of Proteus making the tale of his Phocæ.

Another natural system of notation is reckoning by twenties, of which we have an example in the word score, signifying a notch or incision in a stick, which obviously points out the method of computation, and the abandonment of which by the Exchequer, singularly enough, led to the burning of the two Houses of Parliament, 1834. There is still another natural system, called the binary, or reckoning by periods of 2; for as we are born with two hands and two feet, it is not impossible but that such a system may have been adopted. system the only digit is unity, and this with the cypher can be made to express all numbers; and as multiplying by units is nothing more than Addition, and dividing by units is nothing more than simple subtraction; the practice of Arithmetic would be reduced to those two rules. Notwithstanding this advantage, yet the expressions for high numbers are of such inconvenient length, that this mode of computation can never be used.

I mention it on account of the notoriety it obtained from a singular conceit of the celebrated Leibnitz.

It has but one digit, and this, with zero or cypher, expresses all numbers. Now as unity may be supposed to represent the Deity, the formation of all numbers by zero and unity was thought an apt image of the Creation of the world by God from chaos.

Leibnitz communicated this idea to Bouvet, a Jesuit missionary at Pekin, at that time engaged in the study of Chinese antiquities, who imagined that he had discovered in it. the explanation of the Cova, or lineations of Fohi, the founder of the Empire. These consist of 8 sets of 3 lines, either entire or broken, arranged either horizontally, or in a nincle.

| 0 | 3 | 2 | 2 | 4 | 5 | 6 | : | |
|---|---|---|---|---|---|---|---------------|--|
| | | | | | | | $\overline{}$ | |
| | | | | | | | j — | |

The broken lines being supposed to represent men, and to increase in value as they descend, these lineations will successively become, in the himsey scale, the representatives of 0, 1, 2, 3, 4, 5, 6, 7. If this explanation be true, we have a species of Arithmetic possessing an antiquity of more than 3000 years. At present these lines are suspended in the temples of the Chinese, and are held in great veneration; and though their meaning is not at all understood, they are supposed to conocal great mysteries, and to contain the key to all philosophy, human and divine.

In concluding what I intended to say about Arithmetic, I hope that the proposition with which I set out, that even in that subject considerable interest may be excited, is sufficiently proved.

But Algebra affords a wider field of investigation; what Arithmetic performs immediately on numbers, it effects upon magnitudes in general. It demonstrates, by means of symbolical language, all the rules of arithmetical computation. Unlimited in its appli-

cations, it is equally useful to the practical man and the theorist. Formulæ of universal utility are derived from its principles, and abstract Theorems as truthful as they are sometimes difficult of interpretation. Among its applications to the purposes of life, none is more important than that which leads to the construction of Logarithmic Tables. This discovery, due to Napier, happened at a time when maritime enterprize seemed to require it-and who can underrate the importance of an invention on which may depend the safety of a thousand souls? With the instruments of Troughton and the logarithms of Briggs, the navigator boldly directs his course over the Atlantic and Pacific, and reaches, with an accuracy truly astonishing, the haven to which he is bound; but to which, with less friendly aid, he could attain only by an accident or by the peculiar skill of the mariner. But the same tables of logarithms, so useful to the seamen, are of high importance to each member of our social community. Without their aid, the calculation of Annuities, the ground-work of Life Assurance, would be rendered painfully laborious; and of any benefit which an enlarged experience might give us, either with regard to the law of Mortality, or to the rate of Interest, we should, without their aid, be very probably deprived. By them the Algebraist may, with some application of his reading, investigate the value of his Policy; and even if he does not avail himself of this privilege, the fact of its being within the range

of a computer is an important safeguard against the designs of adventurers. Life Assurance is a guage of the morality of a nation, indicating a want of selfishness, since men forego the enjoyment of present income, for the future benefit of those who by blood or affection have claims upon their love and interest. The disastrous effect, humanly speaking, of the death of a parent, is in a pecuniary way diminished by them, and the widow and the orphan have much of their sorrows relieved by them. Thus Science aids Virtue in her efforts to benefit mankind, and the computations of the mathematician render the wife of the seaman confiding and cheerful, and the widow of the professional man resigned and grateful.

Algebra, taken in its most limited sense, affords the solution to a number of questions of great interest; such are series formed arithmetically, or by a continued proportion—the combinations of numbers—the various properties of integers—the singular results arising from prime Numbers and continued Fractions.

But, extending the notion of Algebra farther, we include the Differential and Integral Calculus, the former of which teaches us how to find the change in a quantity, from the minute change of some other quantity on which the first is dependent; while the latter calculates the total change from the infinitely small change of one or more of its elements.

I can only glance thus hastily at such subjects, which are capable of great extension even in the

present advanced state of our knowledge; which enable the young student easily to solve questions which baffled Bernoulli, and fully occupied the patient thought of Newton.

Of these two processes of investigation, Newton was the first, if not the only discoverer. The invention of the telescope by Galileo demanded their aid, for without new and more powerful means of calculation, it would have been little more than a toy, or used only in Navigation, and the simpler problems of Astronomy. The joint labours however of the observer and the computer determine with precision the motions of the planet, and sometimes that of the comet. and finally ascertain, from observed small effects or changes of position in one planet, the existence of The telescope of Herschel revealed the another. distant Uranus: while the changes in that planet led the mathematicians Le Verrier and Adams to predict the reality of Neptune.

But I pass to the other great division of my subject: Geometry. The Elements of Geometry collected, arranged, and partly written by Euclid, have now for two thousand years been the text book of the schools. Unlike all other books of science, time only adds to their authority: the geometrician rests on them as on a sure foundation: the simplicity of their logic, and the admirable arrangement of the propositions, have caused them to stand in the first place as a mental exercise. I can mention only a few

[Q. C. LEC.]

figures treated by Euclid, which may profitably occupy your attention.

The triangle, the simplest of figures inclosed by straight lines, has all its properties explained and proved; and as all rectilineal figures may be reduced to a series of triangles, their properties, and their magnitude, may be found when the triangle is determined.

Many practical uses are made of the triangle, among which the measuring of land is one; this use must have arisen with the first possession of property. especially in countries thickly populated, and with slender portions of land capable of producing food. Hence it is said that Egypt, which needed its services, was the parent of Geometry, and its first application, Trigonometry. The periodical overflowing of the Nile removed or destroyed the landmarks by which the different portions of land were known, and thus the rules obtained from these two subjects were the means of restoring the property to the rightful owners. Such is the reputed origin of Trigonometry. a section of Geometry, or rather of Algebra applied to Geometry, which has risen from its subordinate situation as the servant of triangles, and now mixes in every department of science, viz. Mechanics, Optics, Hydrostatics, and Astronomy. The railway engineer could not lay down his curves, the civil engineer make his constructions, without it.

The Circle is the simplest of curved figures, and its complete uniformity has made it eminently useful

in the construction of mathematical instruments, for by it the comparative magnitudes of different angles are measured, and thus the angular distances of objects, whether on the earth or in the sky, may be determined. A degree may be the 90th part of a right angle, or the 90th part of a quadrant, and we may, if we be careful, use these definitions indifferently. If two lines be drawn from the centre of the earth to two equally bright stars, we may, by a circle divided into degrees and minutes, observe the angle between the lines: and if we knew the distance between the stars, we could find their distance from the earth; or their distance from each other, if their common distance from the earth was known.

So also if two lines be supposed to be drawn from the centre of one of the fixed stars to two points in the Earth's orbit, we can shew by an ordinary arithmetical operation how enormous the distance of any star is from the Earth; and thus satisfy ourselves that the millions of millions of miles, which are said to express these distances, may be tested with a sufficient degree of accuracy. Thus, if the circumference of a considerable circle be divided into 360 equal parts, each is called a degree; if each again be divided into 60 parts, each new subdivision is a minute; and we shall find that these portions, even in a large circle, become small, and that the chord of each arc will be very nearly equal to the arc itself; but if the division be supposed to be carried to seconds,

each being 60th of a minute, the 3600th of a degree, and 324,000th part of a quadrant, no sensible difference appears between the arc and chord; for if the quadrant were a mile in length, each division would be less than the 1sth of an inch; and the difference between the chord and arc of such a circle, compared with the circle itself, is a quantity altogether insensible to calculation. Now suppose at one of the solstices, a telescope placed in the meridian to be directed to a fixed star, such as Sirius, now so brilliant in the heavens; and after six months, when the Earth has reached the opposite point of its orbit, the telescope be again directed to the same star, and the change of position of the telescope, if any, be observed; in general no alteration of the inclination can be found, but we will suppose it 1": Then, as the two equal lines drawn from the opposite portions of the orbit meet at the star and include an angle of 1". the star must be the centre of a circle, the chord of 1" of which, is the distance between the two points of observation, a distance not less than 190 millions of miles, and the circle must be one whose quadrant is 324,000 times as great, and the radius of this circle at least 206,000 times 190 millions of miles. Such is the distance of the nearest fixed star; a ray of whose light, though travelling at the rate of 200,000 miles in a second, and which would pass over the diameter of the earth's orbit in sixteen minutes, would not reach us till after an interval

of 6½ years. This numerical computation may be easily gone through, and the reader satisfied that these prodigious numbers are not the mere coinage of the brain.

The next Euclidian figure I shall allude to is the Parallelogram: the general name of all four-sided figures, the opposite sides of which are parallel; in one particular case it becomes the square, in another the oblong.

Its application to Mechanics, whether to that part which strictly speaking is mechanics, namely, the Theory of Machines; or whether to the explanation of the motion of celestial bodies, is of the highest importance. In nature, an effect is seldom the result of a single cause. The ship obeys the two impulses of the tide and the wind; the planet, chiefly attracted by the central body, is also impelled by the other members of its system; the waters of the ocean, acted on by the moon and sun, are for an instant drawn up in a heap to one place, and thus produce the wonderful phenomena of the tides. These things the Parallelogram serves to explain. Take two lines drawn from a common point, at which the two forces act, in the same proportion to each other as the forces are and in their direction, then make a parallelogram of which these two lines are two sides, and the diagonal drawn from the given point will, on the same scale as the two lines drawn, represent the joint effect of the two forces. This simple proposition is the foundation of all Mechanics.

There are many other figures in Euclid, to which time forbids me to allude; and I conclude with this observation:—

If six equilateral triangles be joined at their angles, they will exactly fill up space in one plane round a point: it is obvious that four squares will do the same thing; and three hexagons may also be so arranged: but no other figures which are equilateral and equiangular, have the same property. Hence in the construction of a wooden, or other pavement, formed of equal and regular polygons, one of these forms must be made use of. When we go to the beehive, we find that the instinct which Providence has bestowed on the bee, has caused it to select the hexagon for the bases of the cell: we should naturally expect that such a form would be taken as would prevent any loss of space, but why the hexagon? It is found that when the equilateral triangle, hexagon, and square includes equal areas, that the six sides of the hexagon are less than the four sides of the square, and also less than the three sides of the triangle. Thus the hexagonal form of the cell, while it gives the same room for the stores of the bee, takes the least quantity of wax in its construction.

Stepping a little beyond the geometry of Euclid, we are led to the curves formed by the cutting of a

word score, signifying a notch or incision in a stick, which obviously points out the method of computation, and the abandonment of which by the Exchequer, singularly enough, led to the burning of the two Houses of Parliament, 1834. There is still another natural system, called the binary, or reckoning by periods of 2; for as we are born with two hands and two feet, it is not impossible but that such a system may have been adopted. In this system the only digit is unity, and this with the cypher can be made to express all numbers; and as multiplying by units is nothing more than Addition, and dividing by units is nothing more than simple subtraction; the practice of Arithmetic would be reduced to those two rules. Notwithstanding this advantage, yet the expressions for high numbers are of such inconvenient length, that this mode of computation can never be used.

I mention it on account of the notoriety it obtained from a singular conceit of the celebrated Leibnitz.

It has but one digit, and this, with zero or cypher, expresses all numbers. Now as unity may be supposed to represent the Deity, the formation of all numbers by zero and unity was thought an apt image of the Creation of the world by God from chaos.

Leibnitz communicated this idea to Bouvet, a Jesuit missionary at Pekin, at that time engaged in comets. Finally I may mention the curve described by unwinding a string from a circle or cylinder, and which gives the form of the toothed wheel, most useful in machinery; this is named the involute of the circle; and to this I may add the cycloid, the curve of Galileo; possessing many singular and interesting properties, and which may for the most part be exhibited by geometrical reasoning.

Having now illustrated the proposition with which I set out, I further state as an important use of mathematics, that it gives a very considerable extension to the vocabulary of our ordinary language, and a clearness of conception of the meaning of many words in constant use, and as constantly misunderstood.

Ask any person you meet with, the meaning of the two words, force and velocity; how vague and unmethodical will the answer be! and what may be said of these two words will apply in like manner to words which are not of such common usage. But in the fine arts, in painting, sculpture, and in architecture, words and phrases are met with, which a very limited knowledge of mathematics will render very intelligible: but without which knowledge, the notions will be obscure, and the meaning, though apparently obvious, in reality concealed. The truth of this remark any attentive reader will acknowledge, and may perhaps recall some instance of passages, which have been frequently read and seem-

word score, signifying a notch or incision in a stick, which obviously points out the method of computation, and the abandonment of which by the Exchequer, singularly enough, led to the burning of the two Houses of Parliament, 1834. There is still another natural system, called the binary, or reckoning by periods of 2; for as we are born with two hands and two feet, it is not impossible but that such a system may have been adopted. system the only digit is unity, and this with the cypher can be made to express all numbers; and as multiplying by units is nothing more than Addition, and dividing by units is nothing more than simple subtraction; the practice of Arithmetic would be reduced to those two rules. Notwithstanding this advantage, yet the expressions for high numbers are of such inconvenient length, that this mode of computation can never be used.

I mention it on account of the notoriety it obtained from a singular conceit of the celebrated Leibnitz.

It has but one digit, and this, with zero or cypher, expresses all numbers. Now as unity may be supposed to represent the Deity, the formation of all numbers by zero and unity was thought an apt image of the Creation of the world by God from chaos.

Leibnitz communicated this idea to Bouvet, a Jesuit missionary at Pekin, at that time engaged in the study of Chinese antiquities, who imagined that he had discovered in it, the explanation of the Cova, or lineations of Fohi, the founder of the Empire. These consist of 8 sets of 3 lines, either entire or broken, arranged either horizontally, or in a circle.

| |) | 3 | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | |
|---|---|---|-------|--|----------|--|---|-------------|---|--|---|--|-----|--|
| | | | | | | | | | | | | | Γ== | |
| | | | | | | | | | | | | | | |
| _ | - | | - | | — | | | | _ | | | | | |

The broken lines being supposed to represent zero, and to increase in value as they descend, these lineations will successively become, in the binary scale, the representatives of 0, 1, 2, 3, 4, 5, 6, 7. If this explanation be true, we have a species of Arithmetic possessing an antiquity of more than 3000 years. At present these lines are suspended in the temples of the Chinese, and are held in great veneration; and though their meaning is not at all understood, they are supposed to conceal great mysteries, and to contain the key to all philosophy, human and divine.

In concluding what I intended to say about Arithmetic, I hope that the proposition with which I set out, that even in that subject considerable interest may be excited, is sufficiently proved.

But Algebra affords a wider field of investigation; what Arithmetic performs immediately on numbers, it effects upon magnitudes in general. It demonstrates, by means of symbolical language, all the rules of arithmetical computation. Unlimited in its appli-

cations, it is equally useful to the practical man and the theorist. Formulæ of universal utility are derived from its principles, and abstract Theorems as truthful as they are sometimes difficult of interpretation. Among its applications to the purposes of life, none is more important than that which leads to the construction of Logarithmic Tables. This discovery, due to Napier, happened at a time when maritime enterprize seemed to require it—and who can underrate the importance of an invention on which may depend the safety of a thousand souls? With the instruments of Troughton and the logarithms of Briggs, the navigator boldly directs his course over the Atlantic and Pacific, and reaches, with an accuracy truly astonishing, the haven to which he is bound; but to which, with less friendly aid, he could attain only by an accident or by the peculiar skill of the mariner. But the same tables of logarithms, so useful to the seamen, are of high importance to each member of our social community. Without their aid, the calculation of Annuities, the ground-work of Life Assurance, would be rendered painfully laborious; and of any benefit which an enlarged experience might give us, either with regard to the law of Mortality, or to the rate of Interest, we should, without their aid, be very probably deprived. By them the Algebraist may, with some application of his reading, investigate the value of his Policy; and even if he does not avail himself of this privilege, the fact of its being within the range

of a computer is an important safeguard against the designs of adventurers. Life Assurance is a guage of the morality of a nation, indicating a want of selfishness, since men forego the enjoyment of present income, for the future benefit of those who by blood or affection have claims upon their love and interest. The disastrous effect, humanly speaking, of the death of a parent, is in a pecuniary way diminished by them, and the widow and the orphan have much of their sorrows relieved by them. Thus Science aids Virtue in her efforts to benefit mankind, and the computations of the mathematician render the wife of the seaman confiding and cheerful, and the widow of the professional man resigned and grateful.

Algebra, taken in its most limited sense, affords the solution to a number of questions of great interest; such are series formed arithmetically, or by a continued proportion—the combinations of numbers—the various properties of integers—the singular results arising from prime Numbers and continued Fractions.

But, extending the notion of Algebra farther, we include the Differential and Integral Calculus, the former of which teaches us how to find the change in a quantity, from the minute change of some other quantity on which the first is dependent; while the latter calculates the total change from the infinitely small change of one or more of its elements.

I can only glance thus hastily at such subjects, which are capable of great extension even in the

present advanced state of our knowledge; which enable the young student easily to solve questions which baffled Bernoulli, and fully occupied the patient thought of Newton.

Of these two processes of investigation, Newton was the first, if not the only discoverer. The invention of the telescope by Galileo demanded their aid, for without new and more powerful means of calculation, it would have been little more than a toy, or used only in Navigation, and the simpler problems of Astronomy. The joint labours however of the observer and the computer determine with precision the motions of the planet, and sometimes that of the comet. and finally ascertain, from observed small effects or changes of position in one planet, the existence of The telescope of Herschel revealed the another. distant Uranus: while the changes in that planet led the mathematicians Le Verrier and Adams to predict the reality of Neptune.

But I pass to the other great division of my subject: Geometry. The Elements of Geometry collected, arranged, and partly written by Euclid, have now for two thousand years been the text book of the schools. Unlike all other books of science, time only adds to their authority: the geometrician rests on them as on a sure foundation: the simplicity of their logic, and the admirable arrangement of the propositions, have caused them to stand in the first place as a mental exercise. I can mention only a few

figures treated by Euclid, which may profitably occupy your attention.

The triangle, the simplest of figures inclosed by straight lines, has all its properties explained and proved; and as all rectilineal figures may be reduced to a series of triangles, their properties, and their magnitude, may be found when the triangle is determined.

Many practical uses are made of the triangle, among which the measuring of land is one; this use must have arisen with the first possession of property. especially in countries thickly populated, and with slender portions of land capable of producing food. Hence it is said that Egypt, which needed its services. was the parent of Geometry, and its first application. Trigonometry. The periodical overflowing of the Nile removed or destroyed the landmarks by which the different portions of land were known, and thus the rules obtained from these two subjects were the means of restoring the property to the rightful owners. Such is the reputed origin of Trigonometry. a section of Geometry, or rather of Algebra applied to Geometry, which has risen from its subordinate situation as the servant of triangles, and now mixes in every department of science, viz. Mechanics. Optics, Hydrostatics, and Astronomy. The railway engineer could not lay down his curves, the civil engineer make his constructions, without it.

The Circle is the simplest of curved figures, and its complete uniformity has made it eminently useful

in the construction of mathematical instruments, for by it the comparative magnitudes of different angles are measured, and thus the angular distances of objects, whether on the earth or in the sky, may be determined. A degree may be the 90th part of a right angle, or the 90th part of a quadrant, and we may, if we be careful, use these definitions indifferently. If two lines be drawn from the centre of the earth to two equally bright stars, we may, by a circle divided into degrees and minutes, observe the angle between the lines: and if we knew the distance between the stars, we could find their distance from the earth; or their distance from each other, if their common distance from the earth was known.

So also if two lines be supposed to be drawn from the centre of one of the fixed stars to two points in the Earth's orbit, we can shew by an ordinary arithmetical operation how enormous the distance of any star is from the Earth; and thus satisfy ourselves that the millions of millions of miles, which are said to express these distances, may be tested with a sufficient degree of accuracy. Thus, if the circumference of a considerable circle be divided into 360 equal parts, each is called a degree; if each again be divided into 60 parts, each new subdivision is a minute; and we shall find that these portions, even in a large circle, become small, and that the chord of each arc will be very nearly equal to the arc itself; but if the division be supposed to be carried to seconds.

each being 60th of a minute, the 3600th of a degree, and 324,000th part of a quadrant, no sensible difference appears between the arc and chord; for if the quadrant were a mile in length, each division would be less than the 1th of an inch; and the difference between the chord and arc of such a circle, compared with the circle itself, is a quantity altogether insensible to calculation. Now suppose at one of the solstices, a telescope placed in the meridian to be directed to a fixed star, such as Sirius, now so brilliant in the heavens; and after six months, when the Earth has reached the opposite point of its orbit. the telescope be again directed to the same star, and the change of position of the telescope, if any, be observed; in general no alteration of the inclination can be found, but we will suppose it 1": Then, as the two equal lines drawn from the opposite portions of the orbit meet at the star and include an angle of 1". the star must be the centre of a circle, the chord of 1" of which, is the distance between the two points of observation, a distance not less than 190 millions of miles, and the circle must be one whose quadrant is 324,000 times as great, and the radius of this circle at least 206,000 times 190 millions of miles. Such is the distance of the nearest fixed star; a ray of whose light, though travelling at the rate of 200,000 miles in a second, and which would pass over the diameter of the earth's orbit in sixteen minutes, would not reach us till after an interval

of 6½ years. This numerical computation may be easily gone through, and the reader satisfied that these prodigious numbers are not the mere coinage of the brain.

The next Euclidian figure I shall allude to is the Parallelogram: the general name of all four-sided figures, the opposite sides of which are parallel; in one particular case it becomes the square, in another the oblong.

Its application to Mechanics, whether to that part which strictly speaking is mechanics, namely, the Theory of Machines; or whether to the explanation of the motion of celestial bodies, is of the highest importance. In nature, an effect is seldom the result of a single cause. The ship obeys the two impulses of the tide and the wind; the planet, chiefly attracted by the central body, is also impelled by the other members of its system; the waters of the ocean, acted on by the moon and sun, are for an instant drawn up in a heap to one place, and thus produce the wonderful phenomena of the tides. These things the Parallelogram serves to explain. Take two lines drawn from a common point, at which the two forces act, in the same proportion to each other as the forces are and in their direction, then make a parallelogram of which these two lines are two sides, and the diagonal drawn from the given point will, on the same scale as the two lines drawn, represent the

joint effect of the two forces. This simple proposition is the foundation of all Mechanics.

There are many other figures in Euclid, to which time forbids me to allude; and I conclude with this observation:—

If six equilateral triangles be joined at their angles, they will exactly fill up space in one plane round a point: it is obvious that four squares will do the same thing; and three hexagons may also be so arranged: but no other figures which are equilateral and equiangular, have the same property. Hence in the construction of a wooden, or other pavement, formed of equal and regular polygons, one of these forms must be made use of. When we go to the beehive, we find that the instinct which Providence has bestowed on the bee, has caused it to select the hexagon for the bases of the cell: we should naturally expect that such a form would be taken as would prevent any loss of space, but why the hexagon? It is found that when the equilateral triangle, hexagon, and square includes equal areas, that the six sides of the hexagon are less than the four sides of the square, and also less than the three sides of the triangle. Thus the hexagonal form of the cell, while it gives the same room for the stores of the bee, takes the least quantity of wax in its construction.

Stepping a little beyond the geometry of Euclid, we are led to the curves formed by the cutting of a

cone by a plane. When the plane cuts both sides of the cone, the boundary of the section is called the ellipse—when the plane is parallel to one side, the boundary is named the parabola: when it cuts only one side, and is not parallel to the other, it is the hyperbola. These curves are named the Conic Sections, famous in the geometry of the ancients, and still very useful in graphically representing the motion of a point submitted to the forces which prevail in nature: of these the ellipse or oval is the most important. The longest line that can be drawn in this figure, called the major axis, passes through the centre of the ellipse, and also through two remarkable points, each of which is called a focus. The properties of this curve may be very easily explained: and when so explained and understood, they render the reading of any popular work on Astronomy, interesting and intelligible. Thus, as the orbit of a planet differs but little from an ellipse, the Sun being in one focus, we read first of the eccentricity of the orbit, which is the distance of the Sun from the centre of the orbit: of the areas described round the Sun, which are the triangles formed by drawing lines from the Sun to the planet in its various positions, the bases of the triangles being the paths of the planets from one place to another. parabola is the curve which would be described by a musket or cannon ball, if the air offered no resistance; and it is actually described by some of the comets. Finally I may mention the curve described by unwinding a string from a circle or cylinder, and which gives the form of the toothed wheel, most useful in machinery; this is named the involute of the circle; and to this I may add the cycloid, the curve of Galileo; possessing many singular and interesting properties, and which may for the most part be exhibited by geometrical reasoning.

Having now illustrated the proposition with which I set out, I further state as an important use of mathematics, that it gives a very considerable extension to the vocabulary of our ordinary language, and a clearness of conception of the meaning of many words in constant use, and as constantly misunderstood.

Ask any person you meet with, the meaning of the two words, force and velocity; how vague and unmethodical will the answer be! and what may be said of these two words will apply in like manner to words which are not of such common usage. But in the fine arts, in painting, sculpture, and in architecture, words and phrases are met with, which a very limited knowledge of mathematics will render very intelligible: but without which knowledge, the notions will be obscure, and the meaning, though apparently obvious, in reality concealed. The truth of this remark any attentive reader will acknowledge, and may perhaps recall some instance of passages, which have been frequently read and seem-

ingly well understood, becoming very different in their complete meaning, through the accidental information thrown upon them by some other book.

But, after all, the mental discipline is for such a class as this the chief advantage. It may be a proud exercise of the intellect to read a language which Newton taught, and by which he explained the harmony of the celestial system—to look backward to the time, when the morning stars first sang together, and to look forward to the hour, when on the reconstructed earth, man immortal shall not only justify the ways of God to man, but shall with invigorated mental powers fully comprehend the wonders of creation.

But our task, and your task, is a more humble one. We must teach, and you learn, the grammar of a science, which demands and will repay your attention; diligence and thoughtful patience are the chief requisites to obtain success: and these being given, a reward will certainly follow.

This Lecture was not delivered till Jan. 24, 1849, on account of Professor Hall's illness.

ADDRESS

AT THE END OF THE FIRST TERM.

THOSE of you who have brothers at any of our public Schools will know that a short time before the vacations there are days set apart for Speeches. No such custom, not even the faintest imitation of it, will, I hope, ever establish itself among us. Whether it is on the whole for good or for evil that those, who must hereafter appear on a larger stage before more general audiences, should be practised in these rehearsals, I am not competent to decide. But I am sure that we should prove ourselves utterly unfit to take any part in your education, if we did not feel that it ought, in its aim and in its methods, to keep display at the greatest possible distance.

Of course, after an opening Session of only a few weeks it will be impossible that we could call you together for any purpose of this kind. But I wish to tell you that we shall be doing as absurd a thing, that we shall be departing as widely from the principle of our College, if we make the attempt next year or the year after that. I would seize the first opportunity which presents itself, to remind you that the effects of Education which are most visible and

brilliant, are precisely those for which we care least; precisely those which we shall not take pains to produce. We did not think a College needful because there had not been enough of show and excitement in female education. We feared there had been too much; we believed that any effort was desirable which could make it more quiet, more unpretending, more in harmony with the course of an orderly domestic life.

Perhaps you will call me presumptuous for speaking of a domestic life, when the very constitution of our Society excludes us from the least controul over any part of your time except that which is occupied in study. On a former occasion I boasted of this as one of our chief merits. We do not venture upon a ground which has been given into other hands to cultivate; which is never, as we conceive, thoroughly well cultivated except by those hands. We could provide no substitute for the family which would not be a very wretched one. But if we are bound to abstain from meddling where we should do mischief, we are also bound to see that when we do meddle we are not counteracting the good that might come to you from any other quarter. Intellectual pursuits may have this effect. They may make a woman less homely in her trust and affections; more restless, more ambitious. They must have this effect, it seems to me, whenever the object set before the students is external success; whenever they learn

chiefly that they may surpass others, or that they may have something to talk of, or that they may exercise a new kind or measure of power and fascination. All studies, pursued with such ends, make the restraints, limitations, diversities of temper and inclination, in a home circle, irksome and intolerable. A person of any quickness and ability who is thus instructed, acquires a sense of strength and independence which she fancies can have no sufficient exercise but in the And her restlessness is increased by great world. another cause. There is a secret feeling, that the knowledge which has been acquired under this stimulus is not sound knowledge. Though much time has been spent upon it, yet it is hastily put together, because the mind was always more occupied with the advantages which were to come of it, than with the thing itself; because the teacher, like the learner, was more careful to have his flowers ready for a gala-day, than to watch the roots. Discontent must accompany the consciousness of insincerity. As the father of a family is often ill tempered and miserable because he is living on borrowed capital, and knows not how soon he may be called on to meet his engagements; so the son or daughter of a family is often as peevish and unhappy, from the sense of living upon merely apparent intellectual stores which may any day be exhausted by a sudden demand. I think I have observed, that the pain which this feeling occasions is often more acute in your sex than

in ours; a sign that you can less easily endure any departure from simplicity and truth.

However little then we can do directly for the moral and domestic character, we can, it seems to me, indirectly, if we determine to make every part of our teaching sound and substantial; of that kind which will not leave a momentary impression on the surface, but will every day penetrate more deeply till it becomes a part of your life.

Such knowledge will combine with all other healthy and humane influences; you will scarcely distinguish it from them. The ordinary intercourse of the family circle will be raised by it, but will not cross or contradict it. There will come out of it no literary affectations; no contempt for what is common or humble. You will learn from it that there is a poetry in daily tasks, which only is lost to us through our insensibility and selfishness, and which, when we are in our right mind, and are not thinking of ourselves, we shall always be able to draw out. The varieties of character which strike us in those with whom we are brought into closer intercourse, will not grate upon ours, but will come in to illustrate and realize what we have read of, and to make us feel what a book of wonders is daily open before us, if we will only read in it. You will see how much more of monotony there is in a large body of people whom you meet in court-dresses, than in half-a-dozen whom you actually know: in whom some fresh

characteristic often, it is true, dark, but often bright and beautiful, may be, appearing every hour. The family altar will explain the mystery of the family hearth, will glorify it and will connect it with common human life, as we see it before us or read of it in History.

Such results, I do believe, follow from real education, and prove that all the efforts which have been made to rob your sex of it, under pretence of making them more devoted to housewifery, were blundering efforts, likely in all times, sure in our own, to defeat the object which they seek.

The teachers in our different departments may have succeeded or failed: but I am certain they have endeavoured to give a real, and not a shew education. They have not taught for effect. And they have felt, and desire to express the delight with which they have felt, that your object is the same as theirs; that you are willing to learn upon the only condition on which they can teach—the condition of caring to know what is the truth of things, and of being patient, that you may know. This conviction is more to them a thousandfold than any direct results which you could produce, any evidence you could give to a bystander, that you had been the better for coming here. If you have the evidence in yourselves, not that you know much more than you did before, but that you are in a way of learning; that you have discovered where you are ignorant; and that

you are reducing into possession something which you held before loosely and feebly-they are well assured that the effect will be felt just where it ought to be felt; that your families will know it by other proofs than the feats in music, or drawing, or language, you are able to perform. They are confident that those of you who will be called (and which of you will, sometime or other, not be called?) to teach others, will have that highest and most blessed reward of having received—that you can communicate. this gift I trust you have been, in some measure, cultivating, not only in the lecture-room especially devoted to that purpose, but in all the lecture-rooms. Every one should be a lesson on Method; every one should give you some hint as to the way in which you should impart both to grown people and children anything which you have made your own. And if that work is undertaken, as a profession, sincerely, humbly, devoutly, by a person who feels her ignorance, but at the same time is sure that she has something which she can and would give, and feels that she may safely depend on a higher wisdom than her own; then every step in instruction is a step in learning; with increase of difficulty comes increase of power; the life, though one of struggle as all life must be, is also one of joy and hope.

Even our short experience enables us to use this language respecting ourselves, though with fear and diffidence. Our difficulties have been so much

smoothed by the kind co-operation we have met with, especially by the help of the Ladies-Visitors, who have performed so much more than they promised, or than we could possibly expect from them, that we have begun without our fair proportion of annoyance and perplexity. We must expect, and prepare you to expect, obstacles which we have not yet encountered. We wish to be thankful that they have not fallen in our way in the very infancy of our knowledge and experience; when they come, I trust, we shall have been taught how to meet them.

We shall meet, if God will, in October, in a spirit, I trust, of gratitude and hope—feelings which are far enough from self-confidence, which are strengthened, not weakened, by self-suspicion. I have spoken of the benefit which studies, rightly pursued, may confer on your domestic intercourse. Let me remind you before we part, that this intercourse, if it be cordial, affectionate, devout, will far more than repay the debt. It quickens the energies for every intellectual pursuit, and makes it the pursuit of realities instead of shadows.

THE END.

NEW BOOKS AND NEW EDITIONS,

PUBLISHED BY

JOHN WILLIAM PARKER, LONDON.

| Raphael; | or, Page | s from | the | Book | of | Life | at |
|----------|---------------------------|--------|-----|-----------|------|---------|------|
| | By A. DE I Author, and | | | | | | |
| | with the Fre | | | CIAL ALIA | пВеш | сие, ви | nui- |

- The Evils of England, Social and Economical.

 By A LONDON PHYSICIAN. 2s. 6d.
- Introductory Lectures delivered at Queen's College, London, by the Revs. F. D. Maurice and C. Kingsley; Professors Brasseur and Bernays; Dr. Beolohi; the Revs. S. Clark, A. B. Strettell, C. G. Nicolay, T. Jackson; Professor O'Brien; John Hullah and Sterndale Brunett.
- English Life, Social and Domestic, in the Middle of the Nineteenth Century, considered in Reference to our Position as a Community of Professing Christians. 4s. 6d.
- Minerals and their Uses. In a Series of Letters to a Lady. By J. R. Jackson, F.R.S. With a Frontispiece.
- The Hand-Book for New Zealand. The most recent Information compiled for the Use of Intending Colonists. By a LATE MAGISTRATE OF THE TERRITORY. 68.

New Books and New Editions,

- The Saint's Tragedy: the true Story of Elizabeth of Hungary, Saint of the Romish Calendar. By Charles Kingsley, jun., M.A., Rector of Eversley. With a Preface by the Rev. F. D. Maurice, M.A. 5s.
- The Lord's Prayer: Nine Sermons, preached in the Chapel of Lincoln's Inn. By F. D. MAURICE, M.A., Professor of Divinity in King's College, London. 2s. 6d.
- What has Religion to do with Politics? By D. R. Morier, Esq., late Her Majesty's Minister Plenipotentiary in Switzerland. 2s. 6d.
- Burnet's History of the Reformation of the Church of England, Abridged. By G. E. Corrisian Professor of Divinity, Cambridge. Octavo. 10s. 6d.

In this Edition the Supplemental Matter added by the Bishop, and which has hitherto existed in a separate form, has been incorporated into the History; admitted Errors have been corrected; and some Changes and Additions made.

- A History of the English Reformation. By F. C. MASSINGBERD, M.A., Rector of South Ormsby. A New Edition, Revised and Enlarged. 6s.
- The Gospel-Narrative: according to the authorized Text of the Evangelists, without Repetition or Omission. With a Continuous Exposition, Marginal Proofs in full, and Notes. By the Rev. John Forster, M.A., Her Majesty's Chaplain of the Savoy. Dedicated, by special permission, to Her Majesty the Queen. Fourth Edition. Royal octavo. 12s.
- College Lectures on Ecclesiastical History.

 By W. Bates, B.D., Fellow of Christ's College, Cambridge.

 Second Edition. 6s. 6d.
- College Lectures on Christian Antiquities and the Ritual of the English Church. By the same Author. Post octavo. 9s. Each with Cambridge, Dublin, and Durham Examination Papers.

Published by John William Parker, London.

- Life of Archbishop Ussher: with an Account of his Writings. By C. R. Elbington, D.D., Regius Professor of Divinity, Dublin. Octavo. 12s. With Portrait.
- Bishop Jeremy Taylor: his Predecessors, Contemporaries, and Successors. A Biography. By R. A. WILLMOTT, Incumbent of St. Catherine's, Bear Wood. Second Edition. 5s.
- Lives of Eminent Christians. By R. B. Hone, M.A., Rector of Hales Owen. Four volumes, with Portraits, 4s. 6d. each.
- Lives of British Sacred Poets. By R. A. WILLMOTT, Incumbent of St. Catherine's, Bear Wood. Two volumes, 4s. 6d. each.
- The Churchman's Guide to the Use of the English Liturgy. In Eight Lectures, with Two Hundred Questions for a Bible Class. By the REV. J. E. RIDDLE, M.A. 3s. 6d.

 Printed uniformly with
- First Sundays at Church. By the same Author. Fifth Edition. 3s. 6d.
- Bible Narrative Chronologically Arranged, in the Words of the Authorized Version. Continued by an Account of the Jewish Nation, and forming a Consecutive History from the Creation to the Termination of the Jewish Polity. By Miss R. M. ZORNLIN. Third Edition, with Maps. 7s.
- Bible Biography. By E. FARR. Foolscap octavo. Second Edition. Reduced to 4s.
- What is Christianity? By T. V. SHORT, D.D., Lord Bishop of St. Asaph. Third Edition. 1s. 6d.

New Books and New Editions,

- Elements of Logic. By R. WHATELY, D.D., Archbishop of Dublin. Ninth (octavo) Edition. 10s. 6d.
- A System of Logic: Ratiocinative and Inductive. By John Stuart Mill. Second Edition, two volumes, octavo. 30s.
- Elements of Rhetoric. By R. WHATELY, D.D., Archbishop of Dublin. Seventh Edition. 10s. 6d.
- Elements of Morality, including Polity. By W. Whewell, D.D., Master of Trinity College, Cambridge. New Edition, reduced in size and price. Two Volumes. 15s.
- Lectures on Systematic Morality, delivered before the University of Cambridge. By the same Author. Octavo. 7s. 6d.
- Sterling's Essays and Tales. Collected and Edited, with a Sketch of the Author's Life. By JULIUS CHARLES HARB, M.A., Rector of Herstmonceux. Two volumes, post octavo, with a Portrait. 21s.
- The Statutes relating to the Ecclesiastical and Eleemosynary Institutions of England, Ireland, India, and the Colonies: with the Decisions thereon. By A. J. STEPHENS, M.A., F.R.S. Two volumes, royal octavo. 3l. 3s. boards; 3l. 13s. 6d. in law calf.
- Indications of the Creator: Theological Extracts from the History and Philosophy of the Industrial Sciences. By W. Whewell, D.D. Second Edition. 5s. 6d.

Published by John William Parker, London.

- Mission of the Comforter, and other Sermons.
 With Notes. By JULIUS CHARLES HARE, M.A., Archdeacon of Lewes. Two volumes, octavo. 25s.
- Christmas Day, and other Sermons. By F. D. MAURICE, M.A., Professor of Divinity in King's College. 10s. 6d.
- College Chapel Sermons. By W. WHEWELL, D.D., Member of Trinity College, Cambridge. Octavo. 10s. 6d.
- Sermons preached before the University of Oxford. By C. A. OGILVIE, D.D., Regius Professor of Pastoral Theology. Octavo. 5s.
- Lectures on the Epistle to the Hebrews, with a Review of Mr. Newman's Theory of Development. By F. D. MAURICE, M.A. 7s. 6d.
- Lectures on the Prophecies. By A. Mac Caul,
 D.D., Professor of Divinity in King's College, London.
 Octavo. 7s.
- Parish Sermons. By ARCHDEACON HARE.
- The Victory of Faith. By ARCHDEACON HARE.
 Second Edition. 6s.
- The Religions of the World, and their Relations to Christianity. By F. D. MAURICE, M.A., Professor of Divinity in King's College, London. Second Edition, reduced in size and price. 5s.
- Book of Common Prayer in Latin. Liber Precum Publicarum; ordo Administrande Come Domini, Catechismus, Ecclesiae Anglicanae. Psalterium. Royal 24mo, printed with red border lines, 5s. 6d. cloth; 10s. 6d. in antique calf, red edges.

New Books and New Editions,

- Principles of Political Economy, with some of their Applications to Social Philosophy. By JOHN STUART MILL. Two volumes, octavo. 30s.
- Essays on Political Economy. By the same
- History of the Royal Society. Compiled from
 Original Authentic Documents. By C. R. Weld, AssistantSecretary to the Royal Society. Two volumes, octavo. 30s.
- Philosophy of the Inductive Sciences. By WILLIAM WHEWELL, D.D., F.R.S., Master of Trinity College, Cambridge. A New Edition, Revised. Two volumes, octavo. 30s.
- History of the Inductive Sciences. By the same Author. A New Edition. Three volumes. 21.2s.
- A Manual of Chemistry. By WILLIAM THOMAS
 BRANDE, F.R.S., Professor at the Royal Institution. The Sixth
 Edition, almost wholly re-written, considerably enlarged, and embodying all the recent Discoveries in the Science up to the present time. Two volumes, octavo. 21. 5s.
- An Introduction to the Study of Chemical Philosophy. By the late PROFESSOR J. F. DANIELL, F.R.S. With numerous Illustrations. The Second Edition. 21s.
- Elements of Meteorology. Two volumes, octavo, with Plates and Coloured Charts. By the same Author. 32s.
- A Cycle of Celestial Objects. By CAPTAIN W. H. SMYTH, R.N., K.S.F., D.C.L., F.R.S., President of the Astronomical Society, one of the Board of Visitors of the Royal Observatory. Two volumes, octavo, with Illustrations. 21.2s.
- Physiological Anatomy and Physiology of Man.
 With numerous original Illustrations. By R. B. Todd, M.D.,
 F.R.S., and W. Bowman, F.R.S., King's College, London.
 Volume I. in cloth, 15s. Parts 2 and 3, 7s. each.

Published by John William Parker, London.

- C. Cornelii Taciti Opera. Ad Codices antiquos exacta et emendata, Commentario exegetico illustrata. Edidit Franciscus Ritter, Westfalus Professor Bonnensis. Complete in Four Volumes. Octavo. 28s.
- The Antigone of Sophocles, in Greek and English, with Critical and Explanatory Notes. By J. W. Donaldson, B.D., Head Master of King Edward the Sixth's School, Bury St. Edmunds. Octavo. 9s.
- The Agamemnon of Æschylus, the Greek Text, with a Translation into English Verse, and Notes, Critical and Explanatory. By John Conington, B.A., Fellow of University College, Oxford. Octavo. 7s. 6d.
- The Phædrus Lysis, and Protagoras of Plato.

 A new and literal Translation, mainly from the Text of Bekker.

 By J. Wright, B.A., Trinity College, Cambridge. 4s. 6d.
- Arundines Cami; sive Musarum Cantabrigiensium Lusus Canori. Collegit atque edidit Henricus Drurt, A.M. Third Edition, Revised and Enlarged. Octavo. 12s.
- A Lexicon of the Hebrew Language. With a Hebrew Grammar, Vocabulary, and Grammatical Analysis of the Book of Genesis. Also, a Chaldee Grammar, Lexicon, and Grammatical Analysis of the Old Testament. By the Rev. T. JARBETT, M.A., Professor of Arabic, Cambridge. Octavo. 21s.
- The Psalms in Hebrew, with a Critical, Exegetical, and Philological Commentary, intended for the use of Students. By G. Phillips, B.D., Fellow and Tutor of King's College, Cambridge. Two volumes, octavo. 32s.

New Books and New Editions.

- A Familiar History of Birds. By E. STANLEY, D.D., F.R.S., Lord Bishop of Norwich. Fourth Edition, with Additions. 5s.
- Ninfa: a Tale. By Louisa Keir Grant. Post octavo. 10s. 6d.
- Six Dramas Illustrative of German Life; from the original of PRINCESS AMALIE of Saxony. With Illustrations. 10s. 6d.
- Readings from Shakspeare, in illustration of his Characters. For use in schools and families. Edited by the Author of "Aids to Development." 4s. 6d.
- Remarks on Some of the Characters of Shakspeare. By T. WHATELY, Esq. Edited by the Archbishop of Dublin. Third Edition. 4s.
- Student's Manual of Ancient History. W. C. TAYLOR, LL.D. Fourth Edition, crown octavo. 10s. 6d. The Student's Manual of Modern History. the same Author. Fourth Edition.
- Becker's Gallus; or, Roman Scenes of the Time of Augustus, with Notes and Excursus illustrative of the Manners and Customs of the Romans.
- Becker's Charicles; or, Illustrations of the Private Life of the Ancient Greeks.

Translated by the Rev. F. Metcalfe, M.A., Fellow of Lincoln College, Oxford.

Post octavo, with Illustrations. 12s. each.

Travels in the Track of the Ten Thousand Greeks: a Geographical and Descriptive Account of the Expedition of Cyrus, and of the Retreat of the Ten Thousand, as related by Xenophon. By W. F. AINSWORTH, F.G.S. 7s. 6d.

LONDON: JOHN W. PARKER, WEST STRAND.



